

SCICOM SEPTEMBER 2014

ICES SCIENCE COMMITTEE

ICES CM 2014/SCICOM:03

REF. COUNCIL

Minutes from the Meeting of the ICES Science Committee (SCICOM)

14 and 20 September 2014



ICES

International Council for
the Exploration of the Sea

CIEM

Conseil International pour
l'Exploration de la Mer

International Council for the Exploration of the Sea Conseil International pour l'Exploration de la Mer

H. C. Andersens Boulevard 44–46
DK-1553 Copenhagen V
Denmark
Telephone (+45) 33 38 67 00
Telefax (+45) 33 93 42 15
www.ices.dk
info@ices.dk

Recommended format for purposes of citation:

ICES. 2014. Minutes from the Meeting of the ICES Science Committee (SCICOM), 14 and 20 September 2014. ICES CM 2011/SCICOM:03. 47 pp.

For permission to reproduce material from this publication, please apply to the General Secretary.

The document is a report of an Expert Group under the auspices of the International Council for the Exploration of the Sea and does not necessarily represent the views of the Council.

© 2014 International Council for the Exploration of the Sea

Contents

1	Opening	1
2	Adoption of agenda and timetable	1
3	Follow up on decisions taken at the meetings of SCICOM (March 2014)	1
4	General arrangements for Annual Science Conference 2014	2
4.1	Preview of SCICOM Open Sessions at ASC 2014 (Monday am/Wednesday pm)	2
4.1.1	Draft resolutions and recommendations addressed to SCICOM (preview and planning).....	3
4.2	ASC Award Selection Group (Best Paper, Poster, Early Career Scientist Awards) – Process.....	3
4.3	Chaperoning keynote speakers.....	3
5	SSGEPI Chair position	3
6	Preview of Theme Session proposals for ASC 2015 and suggestions for plenary speakers	3
7	ICES Strategic Plan and Implementation Plan (including ASC launch)	4
8	Performance Measurements for Strategic and Implementation Plans	4
9	Delivery of operational oceanographic products to IEA process	5
10	Cooperation with other organisations	5
10.1	North Pacific Marine Science Organization (PICES)	5
10.2	CIESM5	
10.3	EUROMARINE	6
10.4	GEF/LME	6
10.5	COFASP	6
10.6	STAGES.....	7
10.7	ESOF 2014 (Public outreach: Science in the City).....	7
10.8	UN Assessment of Assessments – brief update	7
10.9	IPBES	8
10.10	Horizon 2020 (ICES)	8
10.11	Science development with OSPAR, HELCOM and EEA-WKRISCO, Europe Assessments.....	8
11	Symposia 2014–2016	9
11.1	Draft Resolutions for Symposia	9
12	Cost of Science Programme (questionnaire process)	10
13	Subgroup on ICES & Project Calls	10

14	ICES Science Fund	11
15	SCICOM Forum	12
16	ICES Training Group (ITG)	13
17	ICES Data and Information Group (DIG)	14
18	ICES Action Areas	16
	18.1 Aquaculture.....	17
19	ICES Publication Group (PUBCOM)	17
	19.1 ICES Journal of Marine Science	17
	PUBCOM recommends that the following decision tree be followed:.....	18
20	Template for Steering Group Reporting	20
21	Reporting of SCICOM/ACOM Steering Groups	20
	21.1 Steering Group on Ecosystem Processes and Dynamics (SSGEPD; Pierce) 20	
	21.2 Steering Group on Ecosystem Pressures and Impacts (SSGEPI; Duplisea).....	20
	21.3 Steering Group on Integrated Assessments (SSGIEA; Reid)	21
	21.4 Steering Group on Integrated Ecosystem Monitoring and Observations (SSGIEOM; Handegaard)	22
	21.5 Benchmark Steering Group (BSG; Schmidt)	23
22	Council Steering Group on MSFD – information	24
23	Strategic Initiatives	24
	23.1 SCICOM/ACOM Strategic Initiative on Biodiversity (SIBAS)	24
	23.2 SCICOM Strategic Initiative on Climate Change (SSICCME)	26
	23.3 SCICOM/ACOM Strategic Initiative on Stock Assessment Methods (SISAM).....	27
	23.4 Need for further Strategic Initiatives	28
24	ASC 2015	28
	24.1 New structures for ASC theme sessions – ICES Strategic Plan and SSG connections.....	28
	24.2 ASC Theme Sessions 2015 (final decisions).....	29
25	Update from Awards Committee	30
26	Summary of ASC 2014	30
	26.1 Conference coordinator evaluation and recommendations for future ASCs	30
	26.2 Input from ACOM/SCICOM meetings.....	31
	26.3 Feedback from SCICOM Open Sessions.....	32

27	SCICOM Annual Report to Council	32
28	Any other business.....	32
29	Closure.....	32
	Annex 1: List of participants.....	33
	Annex 2: Informal meeting between PICES and ICES on the continuation of strategic cooperation.....	38
	Annex 3: EuroMarine+ Kick-off Meeting.....	40
	Annex 4: Aquaculture and Arctic	42
	Annex 5: Theme Sessions for ASC 2015	47
	Annex 6: SCICOM September 2014 – Actions and Decisions.....	49

1 Opening

The SCICOM Chair welcomed participants, and asked for a tour de table to introduce attendees, which included guests and country alternates (see **Annex 1**).

Apologies for Sunday, 14 September, were received from Dave Reid (Ireland) and for Tom Noji (US), who was unable to attend the ASC. The US was represented by Bill Karp (US Alternate). For the second day of the SCICOM meeting John Pinnegar, incoming SCICOM member, was welcomed

A special welcome was extended to Tom Therriault, PICES Science Board Chair, and Laura Richards, PICES Chairman.

SCICOM Chair thanked the Spanish hosts for the invitation to a welcome reception to be held at the City Hall of A Coruña on the invitation of the Director of the Instituto Español de Oceanografía (IEO) and the President of Marina Coruña.

2 Adoption of agenda and timetable

The agenda was accepted without comments and no new items were brought up for inclusion.

3 Follow up on decisions taken at the meetings of SCICOM (March 2014)

Most actions agreed at the last meeting of SCICOM (March 2014) were completed. The following open items were raised:

- The ICES Data Centre will contact Aquanis/Sergej Olenin (Klaipeda University) and enquire about the possibility of setting up an online reporting tool of non-indigenous species in ICES.
- The update from DIG to SCICOM on the feasibility study on “Scientific data storage under the Data Collection Framework” was postponed till the SCICOM midterm meeting.
- SCICOM was informed that Bureau had accepted the SCICOM decision that PUBCOM should continue to report to SCICOM.
- SCICOM was informed that PUBCOM and Secretariat have developed a plan for publications online.
- SCICOM has recommended continuation of the ICES Science Fund and the ICES Science Fund 2015 ff. is pending feedback/approval from Council. The Science Fund subgroup (under SCICOM) met intersessionally by WebEx and has revisited the process and criteria for evaluation.
- A new procedure for project partners in HORIZON 2020 in place.
- SSGIEA WebEx, invitation to SCICOM Chair is still pending.
- SCICOM will follow up on SICCME and SIBAS chairmanship during this ASC. Furthermore, the possibility of nominating a SSGIEA Co-Chair is up for consideration.

4 General arrangements for Annual Science Conference 2014

4.1 Preview of SCICOM Open Sessions at ASC 2014 (Monday am/Wednesday pm)

The following Open Sessions were hosted by SCICOM at this year's ASC:

Monday, 15 September

- SCICOM Open Plenary: Strategic Scientists: Shaping the future path of ICES together

SCICOM was informed that this year the open plenary will be a joint presentation by the SCICOM Chair and SSG Chairs on stage. This year there will be special focus on early career scientists. The SCICOM Chair's talk will encourage personal strategies, person development within the framework of ICES and how you can get support to develop your career from the mentoring community in ICES.

- Joint Open Session: Integrated Assessments and Ecosystem Surveys (SSGIEA/SSGIEOM)
- Joint Session: Steering Group on Ecosystem Processes and Dynamics/Strategic Initiative on Biodiversity Advice and Science (SSGEPD/SIBAS)
- Open Session on Ecosystem Pressures and Impacts (SSGEPI)

Wednesday, 17 September

- SISAM Open Session: Advancement of stock assessment methods to support sustainable fisheries
- BSG Open Session: Finding ways forward for integrated ecosystem understanding and advice
- Facing the Data Armada: An Open Session on big data, operational products, and publishing
- SICCME Open Session: Key findings of the 5th Report of the IPCC; SICCME plans for 2015–2016

More visibility of SCICOM in the community.

SCICOM was informed of the following new activities:

- The name badges for SCICOM and ACOM members will be in a different colour to make committee members more visible to ASC participants.
- As part of the visibility project a SCICOM 'bus stop' will be introduced at the Welcome Reception. The idea is for SCICOM members to engage with young scientists and introduce them to the new Strategic and Implementation Plan.
- During ASC week there will be meetings geared especially towards early career scientists. This will be an opportunity for exchange between award winners, keynote speakers and other high-level senior scientists, and newcomers. A group of people volunteered to engage in this. Those young scientists who have received funding from ICES will be invited.

4.1.1 Draft resolutions and recommendations addressed to SCICOM (preview and planning)

The Secretariat informed SSG Chairs and SCICOM members of the process and location of the draft resolutions.

4.2 ASC Award Selection Group (Best Paper, Poster, Early Career Scientist Awards) – Process

In March 2014 SCICOM appointed an Award Selection Group for the 2014 ASC:

Nils Olav Handegard (Norway) Chair; Myron Peck (Germany); Antonina dos Santos (Portugal); Antanas Kontautas (Lithuania); Atso Romakkaniemi (Finland); Dariusz Fey (Poland); and Francisco Velasco (representing ACOM).

The group is tasked to select the winners of the 2014 ASC Merit Awards (Best Presentation, Best Poster, and three Early Career Scientist Awards). The Secretariat has provided an online nomination tool for conveners to nominate their award candidates.

Bill Karp volunteered to join the Award Selection Group.

4.3 Chaperoning keynote speakers

SCICOM representatives were appointed as hosts and contact persons to liaise with the keynote speakers.

Begoña Santos was appointed for Ana Parma, and Yvonne Walter was appointed for Phil Levin. For Luis Valdes, who is already very familiar with ICES no host was appointed.

5 SSGEPI Chair position

Decision: Henn Ojaveer was approved by consensus as SSGEPI Chair for the period 2015–2017 (with the possibility of a one-year extension).
--

SCICOM thanked the outgoing Chair, Daniel Duplisea for doing an excellent job as Chair SSGEPI (and before that SSGSUE).

6 Preview of Theme Session proposals for ASC 2015 and suggestions for plenary speakers

In March 2014 SCICOM appointed a subgroup to propose the ASC 2014 Theme Session Programme, based on the ratings provided by SCICOM members and the need for a balanced programme. The group would be chaired by Brian MacKenzie on invitation by SCICOM, and included Olafur Astthorsson, Peter Wright, Henn Ojaveer, Matts Svensson, and Begoña Santos.

SCICOM members were reminded to submit proposals for plenary speakers for the ASC 2015 to the SCICOM Chair.

7 ICES Strategic Plan and Implementation Plan (*including ASC launch*)

The SCICOM Chair informed SCICOM that the welcome reception on Monday will also be the official launch of the Strategic Plan to the science community.

8 Performance Measurements for Strategic and Implementation Plans

Bureau has requested ACOM and SCICOM to identify performance measurements for the implementation plan. These performance measurements should serve as a supporting tool for the Steering Group Chairs. A table had been prepared with a summary of the objectives and priority areas of the science implementation plan, plus actions, actors, timing, indicators and supporting activities. SCICOM discussed ways how to populate the table and on performance measures in general.

Actions could be identified in the ToRs SSGs to fill into the table. However, there is a need to go beyond listing ToRs to help SSG chairs and EG chairs identify what kind of action is required and whether new EGs are needed to cover a gap. Performance measure should be soft guidance document and not a retrospective education plan. The Science side cannot identify the targets in the same specific way as ACOM does. SCICOM should rely on SSG and EG chairs to evaluate their self-performance on an annual basis.

SSG chairs carefully stated that SCICOM should take care not to expand the reporting burden but rather spend time working with the Chairs. The job of SSG Chairs is to help steer and encourage the EG Chairs. SCICOM has to oversee the work, and SSG Chairs extract the results of the groups. The question is what mechanism for reporting Council requests in a technical and/or scientific way.

SCICOM via its SSG Chairs should via the Expert Group ToRs identify and assure delivery relevant to the Science Plan. This could be processed into a guidance document. Successful fulfilment of the ToRs should be defined and a way of finding products and actions related to ToRs should be identified. Problematic areas (e.g. attendance) should be listed. Because every working group is different, the SSG Chairs should be the ones to interpret the outputs and evaluate whether the groups serve their purpose.

SSG Chairs report on their activity every autumn and it has to be kept in mind that such an evaluation would be an extra burden for them. No numeric targets should be put in place. One view raised was that the document itself should not show performance indicators but rather decode the Science Plan to see connections between EG ToRs and implementation of Science Plan. As an overview considering the gaps in the science portfolio performance measurement could be helpful.

Action/conclusion: The SCICOM Chair will report back to Bureau on the views expressed by SCICOM members and SCICOM Leadership will continue to work on this.

SCICOM Chair will clarify with the ACOM side what is meant by specific action requested from SCICOM when SCICOM is mentioned in their performance measure plan.

9 Delivery of operational oceanographic products to IEA process

The ICES call for Operational Oceanographic Products was quite successful with 8 submissions. These ranged from physical oceanography to zooplankton time series. Most of our ecoregions were covered. Four of the proposals are very robust from organizations that are prepared to deliver for free.

The objective of the OOPS initiative was to develop relationships with oceanographic product suppliers and create mechanisms to feed these products through to the ICES Data Centre for use by our community and in the ecosystem overviews.

The review team (Mark Dickey-Collas (ICES science), Pierre Pepin (Canada), Jörn Schmidt (Germany), Paula Fratantoni (USA), Pierre Petitgas (France), Hjalte Parner (ICES Data Centre) will evaluate the eight proposals against the pre-agreed criteria. They will report by mid- October. Each reviewer hence declared that they are independent of any of the proposals.

For full details of the call SCICOM members were referred to: <http://www.ices.dk/news-and-events/news-archive/news/Pages/Call-for-Operational-Oceanographic-Products-and-Services.aspx>

After discussions, it was confirmed to SCICOM that this was an iterative process, with the SLAs likely to exist for an initial number of a few years.

10 Cooperation with other organisations

10.1 North Pacific Marine Science Organization (PICES)

PICES is a close and well-established partner to ICES. There is an element of continuity, acknowledging that we are regional organisations cooperating on global issues. In addition to cosponsoring theme sessions and symposia, both organisations have (or are in the process of having) new strategic plans in place. It is thus timely to review what we have done so far, and where we are heading and join forces in the future.

PICES Science Board Chair Tom Therriault noted that the cooperation has been quite productive. SICCM is producing excellent work on climate impacts. Each organization has changed some of the areas they are working in, so re-listing priorities are a useful exercise.

PICES Chair Laura Richards informed the meeting that PICES is in the process of appointing a new Executive Secretary later this year and renewing their Strategic Plan which will expire in 2015.

There may be mutual benefits in looking at common problems in terms of implementation of the ICES and PICES Science Plans.

An informal meeting took place during the ASC with the appointed ICES members of a renewed joint P/ICES group on strategic cooperation with the PICES representatives chaired by the Head of Science (minutes in **Annex 2**).

10.2 CIESM

During a meeting of the CIESM and ICES secretariats in December 2013 concrete steps were agreed to enhance scientific cooperation. As a follow-up, there is the workshop **ICES-CIESM workshop on 'Latest advances regarding the ecology and impact of *Mnemiopsis leidyi*', including its associated alien predatory ctenophore *Beroe* spp. and economic aspects'** (JWMS), chaired by Sophie Pitois, UK (ICES) and

Tamara Shiganova, Russia (CIESM), held during the ASC. It is held back-to-back with the Theme Session A on jellyfish in order to have broad expert participation.

10.3 EUROMARINE

The “kick-off meeting” for the new construction EuroMarine+ held 28-29 April 2014 in Paris, France, was attended by the ICES HoS. The salient points that came out of the meeting were (for more detailed information, see observer report in **Annex 3**):

- EuroMarine+ will be implemented in 2014 as a dual structure: a consortium will gather member organizations and decide of all matters; it will be backed up by a legal, non-profit entity in charge of daily management.
- Full membership implies in-cash, yearly contributions of 2,500 €, or more on a voluntary basis; it provides voting rights in the decisional body, namely the General Assembly; so far, 39 research institutes have signed up for full membership resulting in a 2014 budget of 170K Euro.
- The budget will primarily be used to fund scientific activities addressing key challenges or topics, and to develop product and services for the benefit of the marine scientific community or third parties.
- The science topics for EuroMarine+ are to emerge from the so-called “trading zones” where the former NoEs overlap thematically, that is between classical and genetic biodiversity sciences and biological and physical oceanography.
- There was no explicit mention of ICES as collaborative partner next to JPI and EMB.
- From first glance EuroMarine+ seems to be a competing structure. However, participating institutes are largely academic and other research. Both organizations seem rather complimentary than competing.

10.4 GEF/LME

The Working Group on Large Marine Ecosystem Programme Best Practices (WGLMEBP) had its meeting in July, as part of the annual LME Forum in UNESCO. The WG was chaired by Rudolf Hermes (BoBLME) and Hein Rune Skjoldal (ICES). The project application is still under development with UNDP and IOC-UNESCO. The ICES Training Programme is still in the focus of the envisaged capacity building block of the GEF-funded project. SCICOM Chair gave a presentation in the LME forum on ICES Training capacity. The plan is to submit the final application to the GEF in autumn 2014.

The discussion went as far as suggesting that similar activities should be undertaken with JPI (cooperation reported repeatedly to SCICOM) and perhaps BONUS. It is also within the remit of individual SCICOM “member institutes” to liaise with JPI because JPI has national constituencies.

Action: The Secretariat should contact JPI OCEANS and suggest regular exchange to have an overview of what is happening within the JPI. ICES should also have regular exchange with other supranational organizations like BONUS.

10.5 COFASP

SCICOM was informed that ICES work has been focused on two tasks:

- In WP2 task 'Elaboration of contents of common programmes'. Stakeholder organizations (e.g. SEAS-ERA, EATIP, EFTP, EAS) were consulted. The deliverable 'Analysis and report on contents of common programmes and joint call in fisheries, aquaculture and seafood processing' was submitted to the coordinator in March 2014.
- In WP4 task 'Training for Human Capacity Building': this task is ongoing, the majority of planned interviews with stakeholders (to identify the knowledge, skills, and attitudes needed for a sustainable development in European fisheries, aquaculture, and sea food processing) have been completed (WEFTA, EUROMARINE, AquaT-Net, Black Sea Commission, EATIP, GFCM), several more to take place until the end of 2014. The plan is to use the autumn COFASP Governing Board meeting to gather views from the COFASP consortium. The deliverable 'Report on future training needs in fisheries, aquaculture, and sea food processing' will be submitted to the coordinator in December 2014.

COFASP intends to launch two more calls for projects during its runtime, the next one by the end of 2014.

ICES is involved in training for human capacity building.

10.6 STAGES

SCICOM was referred to the STAGES report which is available on the STAGES website, it was presented in June 2014 at the final workshop.

10.7 ESOF 2014 (Public outreach: Science in the City)

SCICOM was informed that ICES participated in [Science in the City](#), a free science festival taking place in Copenhagen 21-26 June in connection with [ESOF 2014](#) (the EuroScience Open Forum). The festival was a great experience and good exercise for ICES in public outreach. About 1000 people visited the ICES booth: mostly families and school classes, but also students and professionals within the field.

The daily programme at the booth was organized according to different topics, and each day included short, popular presentations on a variety of subjects ranging from how scientists count the fish in the sea to deep sea species/habitats and the problem of marine litter. Besides general promotional material, two laptops were available for the public to explore the ICES website, popular advice, etc.

10.8 UN Assessment of Assessments – brief update

The current status of the United Nations World Ocean Assessment. Current status of the process is: the groups have been assigned from the pool of experts, and are now summarizing the work. The first World Ocean Assessment is to be completed by the end of 2014. Approx. 600 experts were included in the pool of experts and the process was driven by member states. ICES experts were included in the pool of experts.

PICES (Tom Therriault) reported that he had written a chapter for the North Pacific, drawing on PICES products, however it had been difficult for PICES (as an organisation) to become engaged in the process. It would be nice to see ICES and PICES more engaged upfront. Tom Therriault was optimistic with regard to the report and noted that this was a nice endeavour to get an overview of the world oceans.

10.9 IPBES

Henn Ojaveer gave an update. The SIBAS Co-Chairs, HoS, and SCICOM Chair met interessionally via WebEx to have a thorough discussion on IPBES. ICES will have an engagement but that will likely be with a rather low profile. One problem is that the IPBES workplan 2014-2018 does not have a strong marine component. Based on discussions, we should keep an eye on the developments and attend key meetings. ICES should be actively engaged during the second stage, from 2019 and see if there will be a stronger marine component. Maybe ICES should engage with partners to have a joint input as observers/stakeholders.

10.10 Horizon 2020 (ICES)

ICES is involved in various capacities from partner to member of advisory boards in several applications to HORIZON 2020 call. The results of applications will be known late November this year. Regarding the next round of calls, the proactive group will work on a way of increasing ICES participation. Naturally the secretariat tries to coordinate and to create strategic partnerships.

The first round of H2020 ended up with ICES participating as partner organization in three two-stage applications:

- BG8-2014 Developing in-situ Atlantic Ocean Observations for a better management and sustainable exploitation of the maritime resources (passed 1st round)
- BG9-2014 Acoustic and imaging technologies (passed 1st round)
- SC5-6-2014 Biodiversity and ecosystem services: drivers of change and causalities (did not pass the 1st round)

and in seven one-stage:

- BG5-2014 Preparing for the future innovative offshore economy
- BG11-2014 Monitoring, dissemination and uptake of marine and maritime research (two competing proposals)
- BG13-2014 Ocean Literacy – Engaging with Society – Social Innovation (three competing proposals)
- BG14-2014 Supporting international cooperation initiatives: Atlantic Ocean Cooperation Research Alliance

Action: The SCICOM Sub Group on proactive Science calls will work on a way to increase ICES participation in the next H2020 rounds, as well as consider a process to assess proposal quality.

10.11 Science development with OSPAR, HELCOM and EEA- WKRISCO, Europe Assessments

ICES has good ties with OSPAR, HELCOM and the European Environment Agency (EEA) through the ICES Data Centre. We want to make sure the developments – through the Strategic Plan – are aligned with OSPAR and HELCOM needs and to this end the Secretariat has set up meetings with OSPAR, HELCOM and IEA to talk about these needs.

Sebastian Valanko who has been working with OSPAR and HELCOM in his previous position and now is Advisory Programme Officer in ICES Secretariat presented him-

self to SCICOM. The advisory side will be helping with the MSFD review and bring in the science side, particularly on the biodiversity topics. ICES is exploring how to deal with their requests – cumulative effects, tools for IEAs, looking for ideas on combining knowledge.

SCICOM was informed about the Workshop on Regional Seas Commissions and Integrated Ecosystem Assessment Scoping (WKRISCO) which has two main objectives; first to summarise progress made and methods used across the ICES integrated ecosystem assessment (IEA) groups and second to scope with OSPAR and HELCOM the science needs for upcoming regional assessments (QSR and HOLAS). This workshop follows on from WKBEMIA 2012; the "benchmarking" workshop of integrated ecosystem assessments. It supports the IEA groups for the next round of development and provides two products, a cross comparison of methods used and being developed by the IEA groups and a scoping exercise of the science needs of OSPAR and HELCOM in preparation for the next QSR and HOLAS rounds.

11 Symposia 2014–2016

11.1 Draft Resolutions for Symposia

The HoS presented the following draft resolutions for SCICOM review and approval:

6th Zooplankton Production Symposium

The **6th Zooplankton Production Symposium** will be held during end of April/early May 2016, in Bergen, Norway with Atsushi Tsuda (Japan, for PICES), Padmini Dalpadado (Norway, for ICES), and Astthor Gislason (Iceland, for ICES) as Conveners.

SCICOM was informed that the symposium is a joint venture involving the ICES Working Group on Zooplankton Ecology (WGZE) and with PICES.

Decision: The resolution was approved by SCICOM, including financial support of EUR 10,000, including the request for the ICES Journal of Marine Science which was supported by the IJMS EiC and PUBCOM.

Symposium on "Targets and limits for long term fisheries management"

A **Symposium on "Targets and limits for long term fisheries management"** to be held from 27 to 30 October 2015, in Athens, Greece, with Anna Rindorf, Denmark, Cathy Dichmont, Australia, Lynne Shannon, South Africa and Jim Thorson, US, as Conveners.

The second request for ICES co-sponsorship had been received at a short notice from MYFISH, which is a follow up on a request from the European Commission to use ICES as outlet of MYFISH results. The symposium will be an outlet of project results.

The symposium (and project) topic is highly relevant for ICES. Conveners basically ask for the ICES endorsement, and limited support for Early Career Scientists. The ICES Journal of Marine Science is requested to publish symposium proceedings. Due to financial limitation the request for funds cannot be granted, unfortunately.

Decision: The resolution was endorsed by SCICOM, and publication as a symposium volume in the ICES Journal of Marine Science was supported by PUBCOM.

ECS conference for 2017. PICES has started planning the next Early Career Scientist Conference to be held in 2017. Korea will host the 2017 event, the venue still to be

determined. The two previous Early Career Scientist Conferences have been extremely successful. The HoS thanked PICES for raising the issue and ICES looks forward to take part in the planning process and getting the steering committee in place.

The HoS informed SCICOM members that short summaries from the 2014 ICES Symposia (held so far) were available in Doc 15.

The ICES/PICES Symposium on “Drivers of dynamics of small pelagic fish resources” is linked with the Zooplankton symposium and workshops are planned for at both symposia to create synergies.

It was noted that for 2015 and 2016 the ICES budget and capacity is fully booked with four and three symposia, respectively.

12 Cost of Science Programme (questionnaire process)

SCICOM was tasked by the Bureau to develop a questionnaire in order to produce an estimate of the total cost of the Science Programme related to the advisory process. At the midterm meeting SCICOM tasked the Secretariat to prepare a first draft questionnaire and a subgroup consisting of Niall O’Maoileidigh, Olafur Astthorsson, Dave Reid, Ingeborg de Boois, Dariusz Fey and HoS reviewed the questionnaire which now reads as follows:

Question 1: Name, Institute, title

Question 2: Please indicate resources used annually by your institute related to surveys or research cruises **other than those dedicated to fisheries data collection** (e.g., research vessel surveys/commercial fish catch sampling), to support ICES or other international fisheries advice in 2013 (or most recent year available). Example: cruises/samples for genetic stock identification methods, fish pathology and diseases, biological effects of contaminants, environmental (hydrography, nutrients) and biological (zooplankton, stomach sampling to monitor food and feeding) monitoring.

Question 3: In 2013 (or most recent year available), what was the typical contribution of resources in support of ICES Expert Group, SSG and SCICOM meetings under the Science Programme. Please indicate the unit (person days or cost with currency indicated).

Question 4 of the advisory questionnaire was dropped because it was specific to advice.

As an example under **question 2** the questionnaire will list environmental and biological monitoring because that kind of work is commonly undertaken as part of fisheries surveys or separately with fisheries advice related objectives. When sending out the questionnaire to participating research institutes it will have to be pointed out that the advice-related questionnaire has been previously circulated and that this is a separate exercise.

Action: The questionnaire needs to be slightly revised for institutes situated in the US and Canada.

13 Subgroup on ICES & Project Calls

At the SCICOM midterm meeting a subgroup was tasked to start a process on how to be more selective and proactive towards upcoming calls, such as Horizon 2020. The

subgroup, which consisted of SSG Chairs, Tom Noji and Wojciech Wawrzynski, met intersessionally to discuss this issue.

The SCICOM Chair presented Doc 17 on ICES proactivity in future Science Calls and emphasized the need to be timely and in advance of the calls in order to proactive. Wojciech Wawrzynski is the Secretariat support for this task.

SCICOM should be active and start identifying relevant calls as well as promote ICES involvement where its participation meets the following three criteria:

- Whether the proposal scope fits the ICES Strategic Plan;
- Whether specific competences are available within the Secretariat and ICES Expert Groups;
- Whether ICES' constituency and intergovernmental nature would be of obvious added value to the project;

Emerging funding opportunities could be uploaded via the SCICOM Forum. A point was raised that the passive/reactive role of ICES is sometimes disappointing (as ICES is not present in some call topics crucial to its interest), at the same time it was stressed that SCICOM Members represent their institutes and a clear added value of ICES participation should be highlighted. Participation of ICES operational groups should be key in project planning whenever research activities are planned, otherwise ICES is usually asked to get involved in training / data management / dissemination capacity (particularly interaction with stakeholders). Participation in externally funded, international programmes also allows ICES to build strategic partnerships (especially in relation to the calls of trans-Atlantic nature). In cases where ICES does not get a role, developments take place without ICES contribution which decreases ICES visibility. ICES as a long-term existing and intergovernmental organization, can also play a role in making the knowledge outputs accessible after the projects lifecycle.

14 ICES Science Fund

The SCICOM Chair presented Doc 18 on the ICES Science Fund 2015. The continuation of ICES Science Fund depends on approval by Council 22–23 October.

The Science Fund Sub-Group (Yvonne Walther (SCICOM Chair), Adi Kellerman (HoS), Peter Wright, Begoña Santos, Jan Jaap Poos, Thomas Noji and Mats Svensson) met intersessionally via WebEx to review the process and criteria for evaluating proposals. The criteria remain unchanged with some clarifications and prioritization.

Point 1-4 are fundamental quality criteria that should be evaluated first, point 5 and 6 are prioritization criteria that should be given weight should 1–4 be fulfilled then proposals with strong impact on 5–6 will be given higher rank.

- 1) Quality of the science proposed, and in particular how it contributes to the delivery of the ICES Science Plan.
- 2) Impact potential of the proposed outputs (scientific and institutional)
- 3) Feasibility of the project and its outputs
- 4) Suitability to the ICES Science Fund (as opposed to other ICES or external funding opportunities)
- 5) Level of engagement between Academic and Government science laboratories.

- 6) Work proposed by scientists in early stages of their career (< 40 years old) should be prioritised.

Action (pending Council approval): The application form be updated for applicants to clearly state; links to ICES Science Plan, engagement between Academic and Government science institutes and if the proposer is an early stage career scientist.

The following suggestions were made by the subgroup:

- The SFSG propose that granted project proposals gets an offer of free publication in JMS (to be discussed with OUP; follows-up to repeated inclusion of publication fee in applications)
- Proposals should have a max duration of 1 year.
- There will be no limit for funding but in the call ICES Science Fund should state an approximate number of proposals (e.g. 10) and the total amount available in the Science Fund 2015, to give applicants an idea of appropriate funding to apply for.
- ICES Expert Groups are welcome to submit proposals as long as the proposal is not a part of the EG regular work and ToRs.

The SCICOM Chair opened the floor for comments.

A discussion followed on the suggestion that ICES Expert Groups are welcome to submit proposals as long as the proposal is not part of the EG regular work and ToRs.

Concern was raised that since many EGs have problems with attendance, ICES should not offer an opportunity of doing the work elsewhere.

Three alternative options were outlined: 1) Encourage applicants to find a group to go to, 2) EG could find someone from academia to attend an EG, 3) the Science Fund group identifies the relevant EG and involves the EG in the evaluation of the project. This would mean adding a ToR to the EG.

It could be clarified that EGs are welcome to submit proposals, but they would be subject to SCICOM (via its subgroup) approval.

The applicants could be asked to find an anchor in an ICES group. That would make their proposals more attractive.

It was clarified that young scientists are defined as scientists younger than 35 and/or less than five years since PhD.

The PUBCOM Chair made the caveat that the offer for free publication in JMS cannot be guaranteed; papers could still be rejected. Still if accepted, it would be great for exposure.

Decision/Action (pending Council approval): The proposal for EG involvement should be clearer and the purpose of it should be clearly stated in the document.

15 SCICOM Forum

The SCICOM Chair presented a proposal to establish a SCICOM Forum to facilitate intersessional approval of draft resolutions and discussions on relevant issues which to some extent would replace WebEx meetings and emails. ACOM already has a Forum which functions quite well and is the main place for their discussions and decisions. The purpose is for SCICOM to become more operational intersessionally. The

exercise will depend on the willingness and activity level of the SCICOM members. The SCICOM Forum would be open for the Science Committee, all alternates and members.

Overall, SCICOM members supported the proposal, but there were questions as to whether the number of email notifications can be reduced. It will be possible for members to change the settings for alerts to only receive one notification per day; this can be configured by each member individually. However, in order to fast-track requests, it would not be appropriate to change settings to weekly alerts.

The SCICOM Chair emphasized that there will be a clear separation between Forum and the SharePoint site. SharePoint is our library, but you don't have a discussion there. The Forum will be the operational scene for SCICOM.

Decision: SCICOM supported the proposal to have a SCICOM Forum.

16 ICES Training Group (ITG)

Steve Cadrin presented a progress report from the Training Programme.

In 2014, the ICES Training Programme has, so far, run two successful training courses, reaching a total of 70 participants. There are another four courses planned for the autumn season, three at the ICES HQ in Copenhagen and one in Paris. Four courses planned for the spring/summer had to be cancelled due to lack of participants. These cancellations may indicate a miscalculation of audience needs and, therefore, it may be necessary to review course selection processes.

Course Offerings for 2014 – The Training Group met via WebEx to review course proposals, previous course reports and guidance from SCICOM to select course to be offered this year. Ten courses were initially advertised, but several were cancelled because of low registration and the SCICOM policy of maintaining a cost-neutral

Training Programme:

- 1) Introduction to Bayesian Inference in Fishery Science - 26-30 May, Helsinki, Finland (Cancelled)
- 2) Communicating Science and Advice - 10-11 June, ICES, Copenhagen, Denmark (Cancelled)
- 3) How to lead an effective technical meeting - 12-13 June, ICES, Copenhagen, Denmark (Cancelled)
- 4) AD Model Builder and Stock Assessment - 16-20 June, ICES, Copenhagen, Denmark (Cancelled)
- 5) Design and analysis of statistically sound catch sampling programmes - 23-27 June, ICES, Copenhagen, Denmark (Run with 21 participants)
- 6) Stock Assessment (Introduction) - 14-18 July, ICES, Copenhagen, Denmark (Run with 40 participants)
- 7) Social Science Methods for Natural Scientists - 13-16 October, ICES, Copenhagen, Denmark (Currently 7 applicants)
- 8) Marine Spatial Planning: Processes and Tools - 27-31 October, ICES, Copenhagen, Denmark (Currently 18 applicants)
- 9) Stock Assessment (Advanced) - 3-7 November, ICES, Copenhagen, Denmark (Currently 20 applicants)

- 10) Application of Geostatistics to analyse spatially explicit Survey data in an Ecosystem Approach - 8-12 December, Fontainebleau, Centre de Geosciences Mines ParisTech (Currently 25 applicants)

Training courses in 2015

Proposals for new and repeated courses are being considered. The Training Group is soliciting instructors for several other courses identified by SCICOM (e.g., climate change). The training group will meet at the ICES ASC to review course proposals and evaluate the business plan as well as continue developments on online teaching and university credits for ICES courses.

As part of keeping the courses as relevant and useful to the ICES community, there has been communication within the ICES secretariat to identify which fields the courses should be aiming for. This has resulted in requests for courses such as SAM modelling, "Opening the box"-type courses, and increased focus on Marine Spatial Planning.

E-learning

At the SCICOM midterm meeting SCICOM reiterated the action item for the Training Group to continue to explore the opportunities of e-learning/e-training as a new format within the Training Programme.

SCICOM was informed that the Secretariat has been very active in looking into different formats e-learning.

A course on PBS mapping (GIS software) was given over WebEx and over five different time zones, and it had been a real success. It would have been impossible to offer the course face-to-face. Courses with a similar setup will be taken into consideration by Training Group.

Training group leader- and membership

SCICOM was informed that Steve Cadrin has accepted to stay on as Chair of the Training Group till end-2015, pending acceptance of the group and Daniel Duplisea is joining the group

The Training Group had been in contact with ACOM with a view to have ACOM representation in the group. They would like to ensure that there is clear relevance to the advisory process addressing training gaps. The ACOM Chair had volunteered to be the ACOM contact in the Training Group and he would be invited to attend the ASC meeting of the Training Group.

As a result Eskild Kirkegaard is also joining the group

Action item: It was suggested to do a review/questionnaire to show the impact in the community of ICES training courses. The Training Group Chair felt that the timing is ripe to do this exercise. It could be a questionnaire sent to EG Chairs asking if they noticed an improvement in capabilities of their members. The format and practicalities of a questionnaire to be further explored by the Training Group.

17 ICES Data and Information Group (DIG)

The plenary meeting of the Data and Information Group (DIG) took place in Copenhagen, 26-28 May 2014. 16 people representing 9 different countries, representatives

from OSPAR and HELCOM Secretariats, Head of ICES Data and Information, and ca. 9 members of the ICES Data Centre joined the meeting.

During the meeting, the group reviewed the progress related to the ICES Data Plan and furthermore met up with ICES Data Centre, and discussed strategic issues related to VMS data, digital data citation, and the ICES Data Guidelines.

ICES Data Plan

On most topics scheduled for 2014, progress had been made.

ICES Data Centre

New tools and facilities that have been developed by the ICES Data Centre were presented and discussed.

The web application of the DATRAS database has been improved. One result is three application programme interfaces (APIs) that provide direct access to DATRAS data from other software i.e. within R programmes.

The standard stock assessment graphs that go to the ICES assessment reports can be selected for certain years, stocks and ecoregions and downloaded from the website. Only published and validated stock graphs can be downloaded.

ICES Data Centre received Estonian eggs data to add to the eggs and larvae database.

To answer to INSPIRE directive readiness, an online available catalogue about services and data products hosted by ICES has been developed using a simple open source ESRI Geoportal. This service will be integrated with the catalogue of datasets (<http://geo.ices.dk/geonetwork/srv/en/main.home>) when development is complete.

Under the science committee (SCICOM) a Call for operational oceanographic products and services was issued, that shall among other potential uses feed into the integrated assessment groups (e.g. WGIAB, WGINOSE).

Operational products are generated outside ICES, so those will not be ICES managed datasets. The ICES Data Centre does not have resources to do all this in-house, so ICES Data Centre has to rely on projects to provide information. The ICES Data Centre is part of the evaluation panel.

VMS data

ICES has produced a VMS data policy stating the conditions of use for experts, to be signed by the chair of groups using the data. DIG reviewed this document and recommends that additionally each expert working with VMS/logbook data signs it before getting access to the data and that all signatures are collated to the same document.

ICES Data Guidelines

A workshop on ICES Data Guidelines was scheduled for 2014. The workshop was cancelled and replaced by an intersessional DIG activity. In March 2014, a meeting took place between IODE and ICES to discuss ICES Data Guidelines in relation to the IODE/JCOMM/ICES clearing house. The ambition is to have all data and data management related documents, including Manuals from instrument manufacturers and software (versions), available through the clearinghouse. It will thus provide an additional access point to the ICES documents, next to the ICES publications library.

Digital Data Citation

Journal citation is an accepted and well-established practice that gives due credit to scientific work done by scientists, and also signposts where others can find this information. In a similar way, citation of data can give proper credit to data providers who have made data available to the scientific community, while also providing a mechanism for tracing back scientific knowledge to the data that underpins it. The [Introduction to Digital citation](#) was presented to SCICOM in March 2014. This document is a living document. DIG has prepared a next version of the document which is made available to SCICOM as a separate document.

The 8 principles of the [Joint Declaration of Data Citation](#) were reviewed at the plenary meeting in order to advise ICES on the adoption of the Declaration. The principles are grouped so as to facilitate understanding, rather than according to any perceived criteria of importance. The group recommends that ICES and individuals adopt the 8 principles. The DIG view on the 8 principles is in the revised document on Digital Citation.

The main issues related to the use of persistent data identifiers are temporary (how data change over time) and the role of PIs issuing authorities (costs).

Action: The DIG Chair invited SCICOM to review the [Joint Declaration of Data Citation](#) and to endorse the 8 principles. SCICOM members were also invited to give feedback on how to achieve that credit is given to the originators for data (also stored at ICES).

18 ICES Action Areas

The Head of Science Programme gave an update on the progress and state of the art for the two new action areas, included to the ICES Strategic Plan, aquaculture and the Arctic (Doc 33).

SCICOM was informed that the secretariat has established work relationships with a number of working groups under the umbrellas of Arctic Council and with IASC. ICES is also on the ICARP III Steering Committee. Furthermore, the ICES Secretariat has submitted two theme session proposals to the ICARP III planning committee:

- Innovative Approaches to Communication for a Changing Arctic (conveners Jörn Schmidt, Stephanie Pfirmann, NN)
- Fisheries in the Arctic Ocean - just a dream or a reality in the near future? (conveners Kevin Hedges, Carolina Behe, Bjarte Bogstad)

ICES continues to have Arctic-related theme sessions at the ASC (2014 Session F).

The Arctic Council currently negotiates an international agreement on science cooperation for the Arctic. ICES has no observer status yet but is represented at the table via the Norwegian delegation. In early September a meeting took place at the ICES Headquarters with AMAP secretariat staff and opportunities for cooperation were identified: IEA and integration of contaminants, inventory of Arctic surveys, and a possible workshop on IEA tools in 2015. The AMAP 28th Working Group Meeting will be held in Whitehorse, Yukon, Canada 16–18 September, including a joint meeting with PAME WG where these plans will be discussed and the further procedure agreed.

A draft resolutions for a joint workshop to be held in spring 2015 with AMAP, with some involvement of PAME, will be under development thereafter.

18.1 Aquaculture

SCICOM was informed that the Norwegian secondment who worked in the Secretariat for one year to provide guidance on developing aquaculture science and advice to member countries had ended in spring. The final product tabled to SCICOM in March 2014 was a strategic paper on the topic which SCICOM took note of without comments. The Secretariat and WGAQUA Chairs upon request from Bureau in June 2014 developed the document further (see SCICOM meeting Doc 33, **Annex 4**). The draft will be reviewed again by the Bureau during the ASC as the basis to continue with establishing dialogues with stakeholders such as FEAP, EATIP, CIMTAN and EAS.

ICES continues to operate with the International Standards Organization (ISO/OSI) on a Liaison A status (full access to WGs and documents) through its WGAQUA representing ICES in the procedures (for instance, environmental impacts, standards). WGAQUA was also charged in 2014 with providing advice on aquaculture to OSPAR upon their request.

19 ICES Publication Group (PUBCOM)

PUBCOM Chair, Myron Peck, presented the PUBCOM report to SCICOM.

19.1 ICES Journal of Marine Science

The ICES Journal of Marine Science, ICES' flagship publication is doing extremely well and measured by the Eigenfaktor, it places 3rd out of 50 in the fisheries category of journals. It also has its highest ever Impact Factor of 2.52. A poll will be created to gauge satisfaction of symposium conveners.

Decision tree for symposium publications

Currently, PUBCOM provides recommendations to SCICOM, which makes the final decision on which ICES symposia will be published in the ICES Journal. Following earlier discussions on symposium volumes and a request from the Secretariat, PUBCOM was presented with information outlining how the current system is inconsistent with best practice in scientific publishing (for journals that operate with an Editor-in-Chief model). Best practice express that the Editor-in-Chief has editorial independence to approve the thematic content and to establish the quality thresholds of all material published in a scientific journal. PUBCOM unanimously concluded that the current decision tree over which symposia are published in the ICES JMS is inconsistent with best practice.

A number of possible alternatives for better adherence to best practice were suggested. Those PUBCOM members not able to attend the PUBCOM meeting provided their feedback in advance via email to the Chair of PUBCOM. A thorough discussion gave serious consideration to all factors and options available. In the end, PUBCOM unanimously supported the principle that the EiC of the ICES JMS should operate with editorial independence over the thematic content and quality of material published in the Journal.

PUBCOM concluded that conveners of potential symposium issues of the Journal were not engaging in dialogue with the EiC regarding their publication intentions. The current format of category 3 resolutions only involves a brief mention of publication intentions at the bottom of the symposia draft resolution. Therefore the EiC and PUBCOM will draft a document to help conveners better plan their publication strat-

egy. It will include information that should be provided in submitted Category 3 resolutions.

PUBCOM supports a process that involves the EiC as soon as draft resolutions are sent to the Head of Science for evaluation. The more detailed publication plans suggested above will facilitate this process. The EiC, Publisher, Secretariat and PUBCOM should establish and maintain an open dialogue process, ensuring that everyone is on the same page and also considering any potential capacity issues. When symposium resolutions are presented to SCICOM, the EiC is encouraged to attend so that the EiC fully understands SCICOM's ranking of the symposium topics. The EiC then decides which symposia will be published in the journal.

PUBCOM recommends that the following decision tree be followed:

1. Conveners send requests for symposium support to SCICOM.
2. SCICOM does not approve. No further action required.
3. SCICOM approves the symposium, but the conveners do not request the Journal. No involvement of the EiC is required.
4. SCICOM approves support of the symposium and the conveners request space in the Journal. If more than one symposium that includes a request for space in the journal is approved, SCICOM ranks them.
5. Conveners of the symposia approved by SCICOM that expressed a wish to publish in the Journal contact the EiC to discuss their publication plan. The EiC assesses the plan, incorporates SCICOM rankings, and makes a decision based on editorial merit. The EiC provides rankings of editorial merit if there are more symposium issue requests than there is space for.
6. If more symposia are supported than there is room for in the Journal, ICES and OUP decide the allocation based on the editorial ranking provided by the EiC.
7. PUBCOM receives quarterly reports from the EiC, and an annual report from the Publisher, Editorial Office and EiC, and can at these times reflect upon the EiC's decisions and provide feedback. If PUBCOM does not agree with the EiC's decision, ~~they can~~ will explain why, and the EiC is given the opportunity to respond.

Comments

Concern raised that in terms of the quality, the decision could be guided by impact factor rather than the science needs. In reply, the PUBCOM Chair made it clear that the major drive is not about impact factor, it is about creating a journal that is prestigious for the whole community. The impact factor is an outcome, not a strategy.

The control rests with SCICOM to choose the symposium volumes, right now the EiC has complete control over content. A good symposium does not mean a good symposium volume. If papers are bad, they will be rejected.

The PUBCOM Chair thanked SCICOM members for their comments. There was overall agreement in SCICOM to support the decision tree, but there was also concern what would happen in case of disagreement.

Decision: Category 3 draft resolutions (Symposia requesting ICES co-sponsorship) are often submitted at a short notice. In order to allow time for a better dialogue, a deadline for Category 3 draft resolutions to be submitted to the Secretariat should be 1 September.

SCICOM congratulated the Editor-in-Chief on the high quality of the journal and impressive impact factor. The whole team is very efficient.

Decision: SCICOM supported the decision tree pending revision of the item 7 last sentence (“can replaced by “will”).

Membership

Two nominations for PUBCOM members had been received:

Valerio Bartolino (Sweden) and Antonina dos Santos (Portugal)

PUBCOM requested additional information from the candidates and therefore postponed the discussion.

ICES publication activities

Hardcopy printing of some publications phased out

The decision to phase out print of some series of publications by 2015, specifically the CRRs and TIMES, had to be moved forward to August 2014 due to unforeseen financial constraints. The Secretariat has communicated this change to authors directly and via in the ICES newsletter in May 2014

The PUBCOM Chair praised the iPaper format of the ICES Insight and Annual report. SCICOM members were encouraged to read it.

This year has been a quiet year for the TIMES with only two new manuscripts having been received since August 2013. Four *ICES Cooperative Research Report* series have been published since the 2013 Annual Science Conference. During the past year 3 new leaflets have been published:

Action items related to ICES publications

- More control needed over post-submission manuscripts (non-responsive authors). There is no strong mechanism to force authors to get back to the Secretariat quickly. It was therefore decided that Secretariat and series editors to set and maintain response deadlines from authors during the production phase, with the possibility of recommending cancellation of publication to PUBCOM if the response to editorial queries is extremely delayed or inadequate.
- PUBCOM requested separate draft resolutions for recurring resolutions (rather than multi-annual)
- Strong appraisal of ‘re-submission’ of draft resolutions – specifically justification of relevance.

ICES and social media

There was a short discussion on Twitter and Twitter etiquette. There was concern that Twitter may constrain open talking and that people will think twice before being quite frank. The Secretariat should consider making it more visible that traffic on Twitter is part of the conference.

Draft resolutions for publications

The PUBCOM Chair, Myron Peck, presented the Category 1 draft resolutions. All draft resolutions, except one, were recommended by PUBCOM for SCICOM approval

The draft resolution “To update and continue the publication of ICES Identification leaflets for plankton (formerly Fiches d’identification du Plancton) series” was not supported. PUBCOM did not support the resolution in its present form and recommended a course of action to strengthen it for future re-submission.

Decision: SCICOM formally approved the Category 1 resolutions.

20 Template for Steering Group Reporting

The SCICOM Chair asked for comments on the report template for the midterm meeting, the ASC business meeting and the SCICOM progress report.

The SSG Chairs will give a 20 minute update of vision and intentions at the SCICOM midterm meeting. Ten minutes will be allocated for discussion.

21 Reporting of SCICOM/ACOM Steering Groups

21.1 Steering Group on Ecosystem Processes and Dynamics (SSGEPD; Pierce)

Graham Pierce, SSGEPD Chair, reported on the highlights from SSGEPD:

- The Joint SIBAS/SSGEPD Monday Open Session was well attended (65 participants). There were good discussions and a theme session proposal was submitted as a result of this.
- WGHABD is seeking ICES endorsement of a symposium. SCICOM has to implore people to organize symposia well in advance. The group is doing a good job, but SCICOM has a rule of one year’s notice. A theme set of articles may be a possibility.
- Prior to the ASC; SSGEPD EGs were asked to respond to a questionnaire providing an overview of whether things are going well or not. Overall the feedback was good, but two groups (WGBIODIV and WGCEPH) reported on low attendance. SCICOM Chair: The issues on lack of attendance will be highlighted in the SCICOM progress report to Council.
- The Working Group on Seabird Ecology (WGSE) has been dissolved and a new group under ACOM, WGBIRD has been established. SSGEPD now has no groups related to top predators.
- SCICOM was informed that a core group for SSGEPD has been established.
- A review/position paper on EG work is planned as an SSGEPD deliverable.

21.2 Steering Group on Ecosystem Pressures and Impacts (SSGEPI; Duplisea)

Daniel Duplisea, SSGEPI Chair, reported on the highlights from SSGEPI:

- Groups like the online interim reporting form and realise that housekeeping is necessary – not too onerous.
- All expert groups but one (MCWG) have switched to a 3 year TOR. One group (WGHIST) will complete its 3 year TOR in 2014.
- WGSAM will be cancelled because of poor attendance
- At the Monday morning Open Session it was suggested that groups are given the question “How could your group contribute to an IEA?” This task should start soon after this ASC and continue throughout the year. Another idea was to organise a reporting session around this at next year’s

ASC (perhaps with Dave Reid). The SSGIEA Chair and the incoming SSGEPI Chair will work on this task for the next ASC.

- How do the EPI groups fit into Science Plan, what do they want from EPI?
- Two new groups, WGITMO and WGBOSV have been transferred from ACOM to SSGEPI. Furthermore it is proposed to move four diadromous fish groups from SSGEPI to SSGEPD ((WGRECORDS, WGDAM, WGERAAS, WKBECEEL).
- Daniel Duplisea (Canada) will be stepping down as chair after 4 years at the end of 2014. Henn Ojaveer (Estonia) will be taking over as EPI chair in January 2015
- Recommendation to incoming Chair: ask groups how they can contribute to the science plan implementation in these sessions

Comments

Will the feedback form to EG's be made available to SCICOM? They are available on the SSG SharePoint sites.

WGMG has just been cancelled. Will be touched on under SISAM. This group has been suffering from low attendance for a number of years.

21.3 Steering Group on Integrated Assessments (SSGIEA; Reid)

Dave Reid, SSGIEA Chair, reported on the highlights from SSGIEA:

- The joint SSGIEA/SSGIEOM Open Session on Monday morning was very well attended with 62 people from 14 countries. Key issues discussed included
 - Ecosystem advice is not just fish (there is still a tendency that ecosystem advice is about fish)
 - Rates and scales – time and space (when looking at productivity a simple snapshot is not enough)
 - How can control rules and reference points be implemented in IEA's? (IEA is starting to think about control rules and reference points for management)
 - Expectation management (this is a process that raises the expectations. It is about developing science and we need to be aware of it)
 - Fish surveys funded; MSFD not (we are funded to do fish surveys not to do ecosystem surveys, this needs to be resolved)
 - IEA spatial scale to start small? (Most try to do big global IEAs, but then cut them down to manageable areas. Whether you start small and work upwards, or the other way is the question)
 - Adaptive management => Experimental management?
 - Hypothesis based studies in IEA's

A workshop has been established, Workshop on the review of the ecosystem survey requirements (WKSUREQ), at the request of Bureau, linked to the evaluation of existing and potential future surveys. The aim will be to evaluate future follow up on the survey needs for MSFD, IEA, etc. The workshop will report to ACOM and SCICOM.

The Workshop on Regional Seas Commissions and Integrated Ecosystem Assessment Scoping (WKRISCO) will meet in November and create a dialogue between IEA researchers and regional seas commissions. Part of the workshop will summarize where we are at with the IEA groups. It will also scope the future strategic science needs for management.

Action: SSGIEA/Dave Reid will start documenting where the IEA groups diverge and converge in terms of methods, approaches and objectives. It was suggested that we may need to set up a conference soon on IEAs. Funding will be sought.

21.4 Steering Group on Integrated Ecosystem Monitoring and Observations (SSGIEOM; Handegard)

Nils Olav Handegard, SSGIEOM Chair, reported from the Steering Group:

- A skills questionnaire was sent to all groups to fulfil SSGIEOM ToR g) Identify shortfalls in skills and knowledge needed to achieve the SG objectives, and where capacity building is needed in particular areas, so that ICES can develop training or other solutions. Some groups may have gaps that they are not aware, and this is not addressed by the questionnaire.
- A roadmap was made earlier giving an overview of survey groups, what are they doing and what are the data products. 7 of 11 responded. This is based on a list made by the secretariat. For each survey group there is a set of data products, aiming to give a full product overview.
- A Theme Session proposal “Ecosystem monitoring of the sea: covering it all” linked to SSGIEOM is on the pre-selection list.
- Requests from SSGIEOM:
 - Update DATRAS to pelagic hauls to fit acoustic surveys (WGIPS, WGBIFS)
 - Develop a database for interpreted acoustic data (WGIPS, WGBIFS)
 - Spatial database
- SCICOM members were encouraged to visit the survey protocols (SISP) on the ICES website.
- WKESUREQ will be working by correspondence, and the idea is to compile all info within the system. This will be an overarching document, not going into specific surveys. Bureau had strong emphasis on including the transatlantic component so anybody involved in Canada and US are invited to contribute. It might also be useful to link to other surveys from oceanography community in other parts of the world, such as Australia, China, New Zealand.

It was suggested to develop a list of individuals with particular skills required for surveys. Some member institutes have such lists and it was also part of the exercise done by WGISDAA. We ask survey groups if they have particular problems and this list is then to solve them. In reply, WGISDAA could start a respective process, working offline.

Discussion on dual chairmanship in IEA

SCICOM was informed that for SSGIEA it had been agreed with Dave Reid that he will report to both SCICOM and ACOM.

Concern was raised that this solution would not necessarily ensure integration, with ACOM and SCICOM meetings run in parallel. The main meeting of ACOM is held in December and therefore this was not seen as a major obstacle.

SCICOM agreed to try this model. ACOM Chair emphasised that this should not be seen as a signal that ACOM does not give priority to this issue, however SSGIEA Chair felt that this setup would be workable.

21.5 Benchmark Steering Group (BSG; Schmidt)

- Jörn Schmidt, BSG Co-Chair gave an update from the Benchmark Steering Group: BSG membership has been handpicked. The Group now consists of Daniel Howell, Sven Kupschuss, Phil Levin, Pierre Petitgas, Floor Quirijns, Begoña Santos, Gudmundur Thordarson, Didzis Ustups, Morten Vinther, Simon Northridge, Sigrid Lehuta, all other Steering Group chairs, DIG Chair, and the SCICOM and ACOM chairs
- The main thing that came up during the ASC is that it is difficult for people to understand what BSG will do. The group is not expected to do all the work, the group is expected to develop and steer a process. The main aim is the effective transfer of science into advice process. Quality assurance is one aspect of the work to be able to give advice, but also to set up a mechanism process to develop methods to pick up tools / information / knowledge from science for the use in either assessment or advice.
- The Open Session was very successful and well attended (100 plus) with three very good talks: Integrating Vulnerable Species concerns into the ICES Advice Framework (Simon Northridge, University of St Andrews), Use of complex models for integrated advice: methodological approaches and examples (Sigrid Lehuta, Ifremer), and Indicators for Integrated Ecosystem Assessments (Phillip Levin, NOAA). They all touched on very specific aspects of BSG work.
- The first BSG Steering Group meeting was also well attended, the following action points were identified:
 - Work on identifying gaps in the current benchmark process
 - Getting a good integration with data quality assurance groups (PGDATA, others)
 - Work on a process/method of including mammal and elasmobranch by catch in the advice.
 - Process to include ecosystem/environmental indicators into the advice
 - Integration of WGSAM work with benchmark process
 - Integration of WGISAA work with benchmark process.

Comments

Would it be possible to simplify what the group is trying to do? BSG is called a benchmark group – the word raises a lot of different expectations in people's minds. BSG needs to communicate their much more complex/encompassing role.

22 Council Steering Group on MSFD – information

The Council subgroup on MSFD met during the ASC and the following three key issues were raised:

- Coordinated monitoring program for MSFD (Surveys)
- Pro-active demonstration advice (Integrated advice)
- Joint process between OSPAR and ICES secretariat

The following actions were suggested to improve the exchange of knowledge of MSFD in Science Expert Groups – outlining a process of identifying MSFD relevant knowledge in Science EGs to ensure transfer into possible proactive advice.

- Step 1. SCICOM provides overview of useful MSFD products developed in Science Expert Groups (excepting those specifically requested by ACOM), channeled from EG chairs via SSG chairs. Deadline 15 November
- Step 2. ACOM receives overview. Sebastian and Mark T, evaluates usefulness of knowledge for possible proactive advice.
- Step 3. If relevant knowledge is found, ACOM, via Mark Tasker determines how to provide advice. Deadline 1 January.

It was clarified that this is a request from the Council Steering Group and that it has not been discussed in ACOM. Step 2 and 3 need to be confirmed by ACOM in December. If Step 1 could deliver input to the ACOM meeting, ACOM would have a better base for decision.

Action: SSG Chairs, based on the previous mapping exercise, should review their WG ToRs and identify knowledge MSFD related outputs. Then SCICOM should identify available applicable knowledge (products) and share with ACOM before December 2014). ACOM will decide on whether to evaluate the usefulness of these outputs, have them peer-reviewed, and proceed with pro-active advice to the European Commission.

SCICOM may consider the idea of an MSFD-related symposium in the coming years. The last symposium on MSFD was held in 2012.

SCICOM noted that a theme session on the MSFD has been proposed for 2015.

23 Strategic Initiatives

SCICOM does not have a formal procedure for election of Chair of Strategic Initiatives. The tenure for Strategic Initiative Chairs is not clearly defined, but there was overall agreement that a longer tenure for these initiatives would be useful.

23.1 SCICOM/ACOM Strategic Initiative on Biodiversity (SIBAS)

SIBAS Co-Chair, Henn Ojaveer, presented an update from the Strategic Initiative.

Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES). A WebEx meeting was held to discuss ICES participation in IPBES activities. ICES might consider contributing to IPBES jointly with its partners (CIESM, PICES, Arctic groups). ICES will be represented at the Third Plenary to be held in Germany in January 2015.

SIBAS recommendation: SCICOM-nominated co-chair to lead continuing dialogue with IPBES.

Cooperation with Convention on Biological Diversity (CBD). Approaches have been made to CBD to co-operate. ICES has peer reviewed proposals for Ecological and Biologically Significant Areas (EBSAs) to be created under CBD.

Other marine topics being addressed by CBD at present include underwater noise and marine debris (no ICES expert groups), marine acidification and marine spatial planning. No further action is proposed at the moment, ICES Secretariat will continue to monitor the situation and make recommendations if appropriate.

3rd World Conference on Marine Biodiversity (Qingdao, China, in October 2014). ICES will be represented with session on 'Linking marine biodiversity science and advice'. WGBIODIV presentation was selected as a keynote talk for this session. ICES First Vice-President, Cornelius Hammer, will be on the Science Board for the 2018 World Conference on Marine Biodiversity.

Biodiversity-related advice. Under arrangements with the European Commission, with NEAFC and with OSPAR, advice has been provided in 2014 on several topics (see SIBAS report). The advice in relation to bycatch, foodwebs and marine mammals was provided in relation to indicators, though some of these need to be reviewed in association with the relevant fisheries regulators.

SIBAS recommendation: The usual further discussions with those commissioning advice should include discussions over the linking together of indicator, both in terms of cumulative assessments and use of indicators in management of human activities.

Cooperation with PICES and CIESM on bioinvasions. ICES-PICES Theme Session on 'The increasing importance of biofouling for marine invasions: an ecosystem altering mechanism' at ASC 2014.

ICES-CIESM *Mnemiopsis leidyi* workshop. Cooperation with PICES was discussed during ASC 2014. SCICOM-nominated co-chair will continue efforts with PICES and CIESM cooperation.

The ASC Open Session

The SGEPD/SIBAS joint session focused on MSFD issues. Chairs of WGBIODIV, WGBE, WGIMT and WGITMO presented SIBAS-related outputs with special emphasis to MSFD and indicators.

Future plans?

It is suggested that a second ICES workshop on marine biodiversity (WKMARBIO II) be arranged to:

- summarize recent developments in ICES and elsewhere on biodiversity-related state and pressure indicators (both single and cumulative);
- investigate links between biodiversity state and pressure indicators,
- analyse the recent advancements in biodiversity science against the management and policy needs,
- design future agenda of SIBAS based on gap analysis.

Speakers from ICES community as well as outside (incl. PICES, CIESM) should be invited, together with representatives from stakeholder groups (incl. from Regional Seas Commissions, EC, EEA).

Overall the spectrum for SIBAS has been too wide, and the recommendation from the SIBAS Chairs would be to narrow down and consider focusing activities on state/pressure indicators (i.e. towards MSFD).

Action: SCICOM members were requested to nominate potential candidates (including short CV/bio) for a new SIBAS Chair with a deadline of 3 October for final approval at the 16 October WebEx meeting. Candidates should be willing to serve.
Action: A clearer scoping for SIBAS to be prepared by the incoming Chair and ACOM Co-Chair and tabled for SCICOM midterm meeting.

23.2 SCICOM Strategic Initiative on Climate Change (SICCME)

Brian MacKenzie, SICCME Co-Chair, gave an update on the main events in the past year and also during the ASC.

The SICCME Open Session was very successful with good attendance with four presentations from the 5th assessment report of the Intergovernmental Panel on Climate Change (IPCC). Key panel findings were presented with respect to past and future climate change, changes in the oceans, impacts on marine ecosystems, and consequences for fisheries and ecosystem management.

IPCC Global climate conference, COP23

The French Delegate, Maurice Heral, had raised the possibility of SICCME having a session at the COP 23 climate conference in Paris in 2015 to communicate how climate change is affecting fisheries, or a summary presentation of key findings from the Brazil symposium. In connection with the congress there are different pavilions at the global level. Modelling workshop output could also be presented at the climate conference.

Action: HoS, SICCME Co-Chairs to look into options for SICCME presence at the COP-23 IPCC Global Climate Conference and give an update to SCICOM March.

3rd Symposium on Climate Change on the World's Oceans symposium, Brazil, 2015. Further planning of the scientific content of the meeting has proceeded and is now completed. Session topics and convenors have been identified. Announcements, website and posters are now available from the symposium organizers.

A new Workshop on Modelling Effects of Climate Change on Fish and Fisheries (WKMOCCLIF), is being organized by NOAA (USA) and IMR (Norway). ICES has been asked to endorse and support the workshop which will be organized jointly by PICES and ICES.

There will be 1–2 theme sessions at the 2015 ASC organized by SICCME.

SICCME leadership

Three of the co-chairs of SICCME (2 from ICES and 1 from PICES) are scheduled to end their terms in 2014–2015.

The two ICES co-chairs are scheduled to end during 2015 (i. e., following completion of the three year standard term and a 1-year extension at request of SCICOM chair.). As it will be advantageous for maintaining continuity, attempts will be made to stagger the changes in SICCME co-chairs over several months, given institutional support and commitments. Although M. Barange could continue until end of 2015, he would rotate off after the Brazil symposium, should a new co-chair be available to start at that time. B. MacKenzie will stay on until end of 2015.

Action: SCICOM members were encouraged to begin identifying candidates for both co-chair vacancies in the coming months. The election of new co-Chairs will be scheduled for the SCICOM midterm meeting.

23.3 SCICOM/ACOM Strategic Initiative on Stock Assessment Methods (SISAM)

SISAM Co-Chair, Steve Cadrin, presented an update for the Strategic Initiative.

The SISAM process was outlined:

1. Identify the current set of available methods
2. Guide the selection of the most appropriate methods for a particular application
3. Educate and provide access to expert information regarding method usage
4. Encourage further testing and development of methods to more closely align with particular management needs and to take advantage of advances in statistical theory, computing power, and new knowledge.

The first task, Identification of available methods, is fairly complete, the second on “Guidance on Most Appropriate Methods” (the product of WGSAM will continue to be very important, thanks extended to them). Poor performance of models was surprising, particularly in the most recent years of assessments. It seems that simpler models might do so complexity is not necessarily the way to go for the future.

The third task “Educate and provide access to expert information regarding method usage” via ICES Symposium: The World Conference on Stock Assessment Methods for Sustainable Fisheries (Boston, USA, 17-19 July 2013).

The ASC Open session on Wednesday, technical lessons learned, and for the next stage. SISAM will rely on the Methods Working Group (WGSAM).

Proposed Action Plan

- Results from simulation exercises and conference contributions suggest that significant strategic investment is needed to support stock assessment research.
 - A great deal of strategic research should be conducted regionally to meet regional objectives.
 - Global initiatives can help with sharing information and tools to promote parallel advancement of effective methods.
- Development of ‘good practices’ guidelines
 - Start with common situations (finfish, target species, age-based, data-rich, TAC systems, developed nations...) but expand over time.
 - Topical Workshops (e.g., CAPAM selectivity workshop)
 - Multi-organizational Methods Working Group (perhaps in coordination with World Fisheries Congress)
 - Guidelines can be used to improve ICES benchmark process both for data-poor and data-rich approaches
- Advancements from modeling experts should be effectively communicated to practitioners through training programs.

If ICES is to take the lead of the multi-organizational venture to improve SA methods, fresh funds will be needed. The Secretariat clarified that funding has been requested from Council for 2015 onward, pending approval in October

Action: SCICOM members were encouraged to convey to their home countries the message of nominating members for the Methods WG (WGSAM).

23.4 Need for further Strategic Initiatives

Strategic initiatives were introduced to increase the profile of ICES specific and new areas of marine science and interact with other key groups outside ICES. All Strategic Initiatives have served as good outreach activities for ICES, and there may be fresh funds from 2015-2018 available for existing and if needed new SI's.

For future topics SCICOM recommends

- Integrated Ecosystem Assessments
- Social and economic aspects of marine science (The human dimension).

Concern was raised that we need to finalise / complete existing SI's, before starting new ones. However, it was also noted that by nature some SI's might need to be long-term initiatives.

Action: Material (formal proposals) will be prepared for the midterm SCICOM meeting and SCICOM will revisit the question pending Council approval of funds for 2015-2018.

24 ASC 2015

SCICOM has been asked by Bureau to review the format of the ASC, including considerations of the business model, and if it is fit for purpose. What does the ASC mean to the organization and how do we want it to be run in the future.

Action: A subgroup consisting of Pierre Petitgas (Chair), Jan Jaap Poos, Antonina Dos Santos, Myron Peck, Eskild Kirkegaard, Jörn Schmidt and Dave Reid will work by correspondence and report to the SCICOM midterm meeting 2015.

First comments

If the ASC didn't exist it would have to be invented; it is indispensable for the science in ICES and for the organization as a whole.

24.1 New structures for ASC theme sessions – ICES Strategic Plan and SSG connections

The following proposals were brought up in discussion:

- There are missing links between the theme sessions and the ICES strategy. This could be changed by dedicating time at the start of each session (or theme session cluster) to highlighting the linkage to the relevant steering group. The conveners or the SSG Chairs (or both) could be tasked to outline the context. Having that in the opening talk of the theme session would be nice.
- SSG Chairs could be more proactive in encouraging theme sessions for areas where there is a gap. Today this is done in the reverse manner; we try to group according to SSG after the proposals have been submitted. To some extent this is already happening, but not in a systematic way.

- Identification of work by early career scientists by the theme session conveners that would match well with expert groups, to bring more young scientists into ICES work.

The SCICOM Chair thanked SCICOM members for good suggestions and comments. No final decision was reached. The item will be revisited at the SCICOM midterm meeting.

24.2 ASC Theme Sessions 2015 (final decisions)

Brian MacKenzie, on behalf of the SCICOM ASC group, presented a proposal for the ASC 2015 theme session package. Basing their work on the votes and rankings provided by SCICOM members, the ASC group had condensed 40 proposals (35 before ASC and 5 during ASC) into a package of 17 theme sessions.

Criteria-used were ranking tool on SharePoint, content, balance, and timeliness.

Five theme session mergers were proposed by the ASC group, and conveners will be asked to merge their proposals.

With four proposals allocated to a reserve list, it was decided to have five theme sessions in parallel and thus 20 theme sessions, altogether.

Decision: The final list of Theme Sessions approved by SCICOM is given in **Annex 5**.

Many proposals were related to ecosystem advice and management, spatial/habitat planning and socio-economic aspects of fisheries, ecosystems, aquaculture, which fits well with the Strategic Plan. Topics little or not covered or represented were physical oceanography, hydrography (none submitted), plankton ecology (few submitted) and fish ecology and life history dynamics - variability in time, space, etc.

Laura Richards noted that PICES would be interested in participating in sessions on ocean acidifications and social dimensions.

When the ICES theme session package has been finalized with mergers, PICES will be asked for their selection for co-sponsorship and, if applicable, PICES conveners will be added to the relevant theme sessions.

Long contra short theme sessions

The issue of sessions covering several days was raised again. It was noted that session mergers do not necessarily produce those sessions. The length of a session is primarily driven by the number of contributions. If the length of sessions is to be limited, criteria need to be defined beyond pure scientific quality, and rejection rates need to be set up by which conveners will be able to evaluate submissions and arrive at the allocated time. A key would have to be developed for each ASC based on the number of submissions, distributed over the number of sessions. This has never been practice in previous years.

The theme session group had received some last minute proposals via the submission website or from outside, during the ASC week. SCICOM decided that the deadline for electronic submission of theme session proposals should not be dynamic but firm. The submission facility will be closed at the deadline and further submissions will only be allowed to come from ASC participants during the ASC week, preferably as spin-offs from theme sessions and other meetings held during the week,

25 Update from Awards Committee

Pierre Petitgas gave an update from the Awards Committee. The meeting during the ASC week reviewed the current process and updated the procedure slightly.

The deadline submitting supporting material for nominated candidates will be advanced to allow better availability of Awards Committee members before the summer season. The Awards Committee agreed that the current criteria for the Prix and for the Outstanding Achievement Awards are appropriate and there is no need to change the criteria for selection. For those candidates that have received strong support, the Awards Committee will contact the nominators and ask if they agree that we keep their nominations for a second year.

For the Prix d'Excellence the award candidates (and whether they should be carried over) need to be evaluated in 2017. This year the winner of the Prix d'Excellence was not able to attend the conference to accept the award. The video worked well, but we did not benefit from interaction/networking with conference participants.

Fredrik Arrhenius will step back as a Swedish Delegate and will therefore leave the Awards Committee. A new Council representative for the Awards Committee will be nominated in October. Fredrik asked the Chair of the Awards Committee to convey his thanks for a pleasant and fruitful cooperation in the Committee.

Action: The Chair of the Awards Committee will contact the ACOM Chair to enquire about ACOM representation on the Committee.

Comments

Merit Awards

Posters and poster guidelines. The posters that received 'honourable mention' were great science, but bad posters. We should only give honourable mention if deserved.

We put forward guidelines last year and they work fine. Still, we need to encourage poster presenters to look at the guidelines. The conveners should be in charge of this.

Posters of the previous winners should be exhibited on the website to give an idea what the guidelines translate into. Also, a suggestion was made to post a video on the ICES website to guide future poster presenters.

We need to set a deadline for posters at the ASC to be set up at the poster walls by a certain time.

Best presentation. Only the presenter is awarded for the best presentation, but the Chair of the Award Selection group felt that it should be the whole author list that receives the award.

Action: Since a new group and a new Chair is running the merit award selection each year, there needs to be a review of how the Award Selection Group works during the ASC, of what is done and how. Myron Peck volunteered to be on the group.

26 Summary of ASC 2014

26.1 Conference coordinator evaluation and recommendations for future ASCs

Anna Davies gave an update on the ASC 2014.

- On Friday 19 September 570 people had registered, from a total of 35 countries. We had 20 no shows and 54 late registrations. The early registration fee closed on 1 August to encourage participants to register early.
- In May we had received 448 abstracts. Following the theme session convenors' selection process, we had 287 oral presentations and 105 posters during this year's ASC. We have received ca 40 withdrawals, most of them posters.
- In most of the theme sessions, poster presenters were offered a time slot to present a slide of their poster. In some cases this led to confusion. Poster presenters have been asking if they had to prepare a talk as well and if they also had to give this talk during the poster session.
- There were question marks regarding the quality, particularly of the posters at the conference this year. The poster award winner was the clear winner, despite also having won the previous year.
- The registration fee included morning and afternoon coffee. Lunches have not been included this year, due to the proximity of the conference centre to several nice lunch places, and the tradition of long lunches.
- Grupio. SCICOM members requested that business meetings and open sessions should be included in the Grupio app. Furthermore, it would be important to have the current year's programme uploaded earlier. Not so many people downloaded the Grupio app, and the Secretariat will do more to promote it next year. For the online handbook there were more than 700 hits on the website, and presumably many ASC participants have also accessed the Handbook via the ASC USB stick.

ASC 2015

The 2015 Annual Science Conference will be held in Copenhagen, Denmark, from Monday 21 September to Friday 25 September. The venue will be the newly re-built part of DGI-byen in the centre of Copenhagen.

DGI-byen is located right in the centre of Copenhagen, a short walk from the ICES secretariat and almost on the door-step of the Copenhagen central train station. DGI-byen was also the venue for the 2002 ASC, however, it is now a brand new building, with very fresh facilities, which have been booked entirely for ICES during the week.

Transport to Copenhagen is very easy, with flights coming in from most major airports, access across the Oresund Bridge, and a well-functioning train system, with the central station just around the corner from DGI byen.

The Opening Ceremony for the conference will be held at the Oeksnehallen, an old industrial building which is now used for events and exhibitions. It's quite spectacular.

26.2 Input from ACOM/SCICOM meetings

The joint meeting of the ACOM Leadership and SCICOM Business Group was held on Saturday, 13 September. The ACOM Chair noted that it is very important to build on this linkage and have joint meetings to ensure good communication between the Science and Advisory side.

26.3 Feedback from SCICOM Open Sessions

We already had good feedback from opening. We could consider getting more people into the opening session, otherwise it was fine.

I think the opening talk given by the SCICOM Chair should present science next year. The purpose this year was to present the SSGs and the SP.

27 SCICOM Annual Report to Council

The SCICOM Chair outlined the structure of the document and reminded the contributors of the deadline.

28 Any other business

SCICOM spring dates.

Action: The next midterm meeting will be held in Copenhagen from Wednesday, 8 April 2015 (starting at 13:00) till Friday, 10 April 2015 (ending at 13:00). The Joint ACOM leadership/SCICOM business group will meet on Friday, 10 April, from 14:00 till 17:00.

Plenary speakers for 2015

The SCICOM Chair extended the deadline for submission of plenary speakers. It would be useful to link keynotes to specific theme sessions.

Denmark (Brian MacKenzie) will be asked to suggest a speaker from Denmark for the opening talk.

SCICOM Members were reminded that the SCICOM WebEx for approval of Category 2 (Expert Group) resolutions and 2015 keynote speakers was scheduled for 16 October – 14:00–16:00.

29 Closure

The SCICOM Chair thanked the outgoing SCICOM members, Peter Wright (UK), Atso Romakkaniemi (Finland) for their important contributions to SCICOM. Thanks were also extended to our PICES guests, the General Secretary, and ACOM Chair for participating in the SCICOM meeting.

The PICES Chair Laura Richards acknowledged the cooperation between ICES and PICES, and thanked for the opportunity to participate in the SCICOM meetings.

Annex 1: List of participants

Name	Address	Phone/Fax/Email
Chair:		
Yvonne Walther	Swedish University of Agricultural Sciences Institute of Marine Research Utövågen 5 37137 Karlskrona Sweden	Phone +46 10 478 40 50 Fax Cell: + 46 709 35 92 82/+46 76 126 80 41 Email yvonne.walther@ices.dk
SCICOM Steering Group Chairs :		
Daniel Duplisea, SSGEPI Chair (and national member Canada)	Fisheries and Oceans Canada Institut Maurice- Lamontagne, Mont-Joli, QC, Canada G5H 3Z4	tel: (418) 775 0881 fax: (418) 775 0740 daniel.duplisea@dfo-mpo.gc.ca
Nils Olav Handegard, SSGIEOM Chair (and national member, Norway)	Institute of Marine Research P.O. Box 1870 Nordnes 5817 Bergen Norway	Phone +47 55238500 Email nils.olav.handegard@imr.no
Graham Pierce, SSGEPD Chair	University of Aberdeen Oceanlab Main Street AB41 6FL Newburgh, Ellon, Aberdeenshire Scotland United Kingdom	Phone +44 1224 272459 Email g.j.pierce@abdn.ac.uk
Dave Reid, SSGIEA Chair	Marine Institute Rinville Oranmore Co. Galway Ireland	Phone +353 91 387431 Fax +353 91 387201 Email david.reid@marine.ie
Jörn Schmidt (Germany), BSG Chair	Christian-Albrechts- University of Kiel Department of Economics Wilhelm-Seelig-Platz 1 24118 Kiel Germany	Email jschmidt@economics.uni- kiel.de
PUBCOM:		
Myron Peck, PUBCOM Chair	University of Hamburg Institute of Hydrobiology and Fishery Science Olbersweg 24 D-22767 Hamburg Germany	Phone +49(0)40 - 4 28 38 6602 Fax +49(0)40 - 4 28 38 6618 Email myron.peck@uni- hamburg.de
DIG:		
Ingeborg de Boois, DIG Chair (will only attend Sunday, 14 September)	Wageningen IMARES P.O. Box 68 1970 AB IJmuiden Netherlands	Email ingeborg.deboois@wur.nl

Name	Address	Phone/Fax/Email
SISAM and Training		
Steve Cadrin	Steven Cadrin University of Massachusetts Dartmouth Department of Fisheries Oceanography 200 Mill Road, Suite 325 Fairhaven MA 02719 United States	Phone +1 508 9106358 Fax +1 508 9106396 Email scadrin@umassd.edu
Guests		
Tom Therriault, Chair of PICES Science Board (14 + 20 Sep)	Fisheries and Oceans Canada Pacific Biological Station 3190 Hammond Bay Road Nanaimo BC V9T 6N7 Canada	Phone +1 Email Thomas.Therriault@dfo- mpo.gc.ca
Laura Richards, PICES Chairman (14 Sep)	Regional Director Science Fisheries and Oceans Canada Pacific Biological Station 3190 Hammond Bay Rd, Nanaimo, BC, Canada V9T 6N7	Phone 250-756-7177 Email Laura.Richards@dfo- mpo.gc.ca
Ex officio:		
Anne Christine Brusendorff, ICES General Secretary	International Council for the Exploration of the Sea H. C. Andersens Boulevard 44-46 1553 Copenhagen V Denmark	Phone 33386701 Email anne.christine@ices.dk
Eskild Kirkegaard, ACOM Chair (20 September)	Eskild Kirkegaard DTU Aqua - National Institute of Aquatic Resources Jægersborg Allé 1 2920 Charlottenlund Denmark	Phone +45 35 88 30 10 Fax +45 Email eskild.kirkegaard@ices.dk
Carmen Fernandez (ACOM Vice-Chair and SSG Benchmark Co-Chair) (20 September)	International Council for the Exploration of the Sea H. C. Andersens Boulevard 44-46 1553 Copenhagen V Denmark	Phone +34 (620) 588 360 Email Carmen.Fernandez@ices.dk
National members and alternates:		
Steven Degraer (Belgium)	Royal Belgian Institute of Natural Sciences (MUMM) Gulledelle 100 B-1200 Brussels Belgium	Phone +32 27732103 Email S.Degraer@mumm.ac.be
Daniel Duplisea (Canada and SSG Chair)	Fisheries and Oceans Canada Institut Maurice- Lamontagne, Mont-Joli, QC, Canada	Phone: (418) 775 0881 daniel.duplisea@dfo-mpo.gc.ca

Name	Address	Phone/Fax/Email
	G5H 3Z4	
Brian R. MacKenzie (Denmark)	Brian R. MacKenzie DTU Aqua - National Institute of Aquatic Resources Section for Ocean Ecology and Climate Charlottenlund Slot Jægersborg Alle 1 DK-2920 Charlottenlund Denmark	Phone +45 35883445 Fax +45 3588-3333 brm@aqu.a.dtu.dk
Henn Ojaveer (Estonia)	Estonian Marine Institute University of Tartu 2a Lootsi EE-80012 Parnu Estonia	Phone +372 443 4456 mobile: +372 5158328 Fax +372 6718 900 Email henn.ojaveer@ut.ee
Atso Romakkaniemi (Finland)	Finnish Game and Fisheries Research Institute Oulu Game and Fisheries Research PO 413 90014 Oulu Finland	Phone +358-205751416 Fax +358-205751879 Email atso.romakkaniemi@rktl.fi
Pierre Petitgas (France and Chair of Awards Committee)	IFREMER Nantes Centre P.O. Box 21105 44311 Nantes Cédex 03 France	Phone +33 240 37 40 00 Fax +33 240 37 40 75 Email pierre.petitgas@ifremer.fr
Jörn Schmidt (Germany and SSG Chair)	Christian-Albrechts- University of Kiel Department of Economics Wilhelm-Seelig-Platz 1 24118 Kiel Germany	Email jschmidt@economics.uni- kiel.de
Ólafur S. Astthórsson (Iceland) (attended on 14 September)	Marine Research Institute Skúlagata 4 IS-121 Reykjavík Iceland	Phone +354 5520240 Fax 3545623790 osa@hafro.is
Niall Ó Maoileidigh (Ireland)	Marine Institute Fisheries Ecosystem Advisory Services Farran Laboratory Furnace Newport Co. Mayo Ireland	Phone +353 9842300 Fax +353 9842340 Email niall.omaoidigh@marine.ie
Georgs Kornilovs (Latvia)	Institute for Food Safety, Animal Health and Environment (BIOR) 8 Daugavgrivas Str. Fish Resources Research Department 1048 Riga Latvia	Phone +371 76 76 027 Fax +371 762 6946 Email georgs.kornilovs@bior.gov.lv
Antanas Kontautas (Lithuania)	Klaipeda University Coastal Research and Planning Institute	Email antanas.kontautas@ku.lt

Name	Address	Phone/Fax/Email
	Herkaus Manto str. 84 92294 Klaipeda Lithuania	
Jan Jaap Poos (the Netherlands)	Wageningen IMARES P.O. Box 68 1970 AB IJmuiden Netherlands	Phone +31 317 487 189 Fax +31 317 480 900 Email Janjaap.Poos@wur.nl
Dick Vethaak (the Netherlands, alternate; attended on 14 September)	DELTAES 177 2600 MH Delft Netherlands	Email dick.vethaak@deltares.nl
Nils Olav Handegard (Norway and SSGESST Chair)	Institute of Marine Research P.O. Box 1870 Nordnes 5817 Bergen Norway	Phone +47 55238500 Email nils.olav.handegard@imr.no
Dariusz Fey (Poland)	National Marine Fisheries Research Institute ul. Kollataja 1 81-332 Gdynia Poland	Phone +48 58 735 61 30 Email dfey@mir.gdynia.pl
Antonina Santos (Portugal, member)	Portuguese Institute for the Sea and the Atmosphere (IPMA) Avenida de Brasilia 1449-006 Lisbon Portugal	Phone +351 21302 7000 Email antonina@ipma.pt
Svetlana Kasatkina	AtlantNIRO 5 Dmitry Donskogo Street RU-236000 Kaliningrad Russian Federation	Phone +7 0112 225 769 Fax +7 0112 219 997 Email kasatkina.svetlana@gmail.com
Maria Begoña Santos (Spain, Member)	Instituto Español de Oceanografía Centro Oceanográfico de Vigo P.O. Box 1552 36200 Vigo (Pontevedra) Spain	Phone +34 986492111 Email m.b.santos@vi.ieo.es
Mats Svensson (Sweden)	Swedish Agency for Marine and Water Management PO Box 11930 40439 Göteborg Sweden	Email mats.svensson@havochvatten.se
Peter Wright (UK)	Marine Scotland Science Marine Laboratory 375 Victoria Road AB11 9DB Aberdeen United Kingdom	Phone +44 1224 295436 Fax +44 1224 295511 Email P.J.Wright@marlab.ac.uk
John K. Pinnegar (incoming UK Member) (attended on Saturday, 20 September)	Centre for Environment, Fisheries and Aquaculture Science (Cefas) Lowestoft Laboratory	Phone + 44 1 502 524 229 Email john.pinnegar@cefas.co.uk

Name	Address	Phone/Fax/Email
	Pakefield Road NR33 0HT Lowestoft Suffolk United Kingdom	
Bill Karp (USA, Alternate)	NOAA Fisheries Northeast Fisheries Science Center, Woods Hole Laboratory 166 Water Street Woods Hole MA 02543 United States	Phone +1 206 526 4000 Fax +1 206 526 4004 Email bill.karp@noaa.gov
ICES Staff:		
	Poul Degnbol, Head of Advisory Programme	poul.degnbol@ices.dk
	Adi Kellermann, Head of Science Programme	adi@ices.dk
	Wojciech Wawrzynski, Professional Secretary for Scientific Cooperation	wojciech@ices.dk
	Mark Dickey-Collas, Ecosystem Professional Officer	mark.dickey-collas@ices.dk
	Claire Welling, Science Programme Assisting Secretary	claire.welling@ices.dk
	Anna Davies, Meeting & Conference Coordinator, Training	anna.davies@ices.dk
	Vivian Piil, Departmental Secretary, Science Programme	vivian@ices.dk

Annex 2: Informal meeting between PICES and ICES on the continuation of strategic cooperation

Participants: Laura Richards (PICES Chair), Yvonne Walther (ICES SCICOM Chair), Tom Therriault (PICES Science Board Chair), Dan Duplisea (ICES SCICOM Canada), Henn Ojaveer (ICES SCICOM Estonia), Mats Svensson (ICES SCICOM Sweden), Adi Kellermann (ICES Head of Science)

The report from the previous P/ICES group on Strategic Cooperation had foreseen a review of the work carried out and an updated plan to be put in place by approximately 2014. Both organizations currently have or are developing new or revised strategic plans, which provides an opportunity to refocus cooperation.

Given a number of SG members from both organizations at the 2014 ASC a meeting was called with the objective of a first, rapid review of the topics and procedures for future cooperation and identifying opportunities for joint meetings of the full group in 2015.

The group agreed that theme sessions, joint co-sponsorship of science symposia and workshops should be continued because they have proven to be efficient and a successful means of cooperation. Strategic Initiatives (ICES) and Sections (PICES) respectively were considered to be the most efficient structural way for cooperating on topics of common interest, for instance SICCME/S-CCME. Although joint Working Groups such as WG21 were seen as efficient their shorter lifetime within PICES will not always provide the stability to develop robust products that fully benefit both organizations.

The list of topics agreed in the 2011 SGSP report was reviewed. Climate change, ocean acidification as well as hypoxia are still considered to be topics of common interest and with potential for synergies although the two latter areas of research represent different constituencies in both organizations. Spatial planning as well as biodiversity issues each surface in various topics and should be considered in the relevant context.

- Climate change and ocean acidification: SICCME/S-CCME has a number of ongoing activities and the 2015 climate change symposium will offer an opportunity for taking stock of where we are and decide on future joint actions. There will also be a theme session on ocean acidification although most OA work currently resides outside of both PICES and ICES.
- Ocean acidification: the option of organizing a symposium on the topic by inviting the OA\marine chemistry science community was discussed. It was suggested that we could try and contact them with a view on liaising, however, we should not just be seen as the enabler for that community. It was decided that more time is needed to develop a mature plan for engaging in OA science, including understanding what SOLAS and IMBER might be undertaking as they review their programs.
- The “old” new topic of marine bioinvasions was put on the table and there was agreement to seek ways and means how to reinvigorate the previous work done in WG21. The reporting and data collection scheme of AQUANIS (<http://www.corpi.ku.lt/databases/index.php/aquanis>) could be used as a joint structure to exchange information on marine bioinvasions.

- Renewable energy in the oceans and the surrounding topics from environmental impacts to long-term effects on the ecosystems was seen as another possible topic of common interest. Spatial planning comes into this field of disciplines.

Joint training activities continue to be a topic to be developed between PICES and ICES. The ECS series has proven extremely productive but other areas of capacity building should be explored, especially for non-ECS's.

Annex 3: EuroMarine+ Kick-off Meeting

Paris, France, 28-29 April 2014

ICES Observer: Adi Kellermann, Head of Science Programme

The kick-off meeting had the objective to present the governance structure and business model to present and potential member institutes of EuroMarine+. ICES Head of Science Programme was invited in his capacity as (former) member of the Advisory Boards of the precursors MarBEF and EuroMarine.

EuroMarine+ represents the merger of the communities of three former European Networks of Excellence (NoEs): EUROCEANS, Marine Genomics Europe, and MarBEF. It was developed by the EC 7th Framework Programme project EuroMarine, the first overarching structure of the three NoEs in response to a EC call targeting specifically such a merger. EuroMarine+ is to represent a bottom-up organization and voice of the European marine scientific community especially in the academic sector. EuroMarine+ intends to work in close cooperation with other European or international players, specifically the European Marine Board and the Joint Programming Initiative for Healthy and Productive Seas and Oceans (JPI Oceans). It intends to become a marine focal point for the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES).

EuroMarine+ will be implemented in 2014 as a dual structure: a consortium will gather member organizations and decide of all matters; it will be backed up by a legal, non-profit entity in charge of daily management. The Consortium is open to first of all the 121 organizations that belonged to one or more of the three NoEs; that including the successor constructions of individual NoEs such as the present EUROCEANS Consortium and the MarBEF+ Association. Additional membership is in principle open but is pending approval of present EuroMarine+ members. Member organizations can choose between full (paying) and invited (non-paying) membership. Full membership implies in-cash, yearly contributions of 2,500 €, or more on a voluntary basis; it provides voting rights in the decisional body, namely the General Assembly. Invited membership does not imply any financial contribution but does not provide voting rights. So far, 39 research institutes have signed up for full membership resulting in a 2014 budget of 170K Euro.

The budget will primarily be used to fund scientific activities addressing key challenges or topics, and to develop product and services for the benefit of the marine scientific community or third parties. After a call for bids, the initial scientific coordination of EuroMarine+ has been entrusted to CNRS and IRD (total 3 bids submitted); the headquarters will be hosted by IRD in Sète, France; IRD will also supervise the Legal Entity, once formed. The secretariat at IRD will be the executive body. More information can be found at the EuroMarine+ website: <http://www.euromarineplus.eu>.

The science topics for EuroMarine+ will emerge from the so-called “trading zones” where the former NoEs overlap thematically, that is between classical and genetic biodiversity sciences and biological and physical oceanography. The seven trading zones seem innovative in parts, but only few unique features characterize them as new, emerging trading zones between the NoEs.

There was no explicit mention of ICES as collaborative partner next to JPI and EMB. External funding will be sought in support of future activities such as research projects, coordination and training activities, workshops, working groups and communi-

cation. There was, however, no clear indication on how EuroMarine+ will interact with HORIZON 2020 and other funding programmes. An advisory role is foreseen for IPBES, however, it was acknowledged that this body has only a small marine play field.

The envisaged governance structure is similar to ICES (with a Steering Committee consisting of a subset of 15 members) and from first glance EuroMarine+ seems to be a competing structure. However, participating institutes are largely academic and other research entities while ICES represent the governmental research institutes with a smaller (albeit growing) academic constituency. Both organizations seem rather complimentary than competing.

ICES Head of Science offered collaboration via the ICES science Expert Groups and Strategic Initiatives and pointed to our rules of procedure and governance system as well established mechanisms and worked examples. Regarding the envisaged advisory role of EuroMarine+, a working group will be established to review existing advisory processes in Europe and ICES be invited to the group.

Annex 4: Aquaculture and Arctic

This document is an update on the progress and state of art for the two new action areas, included to the ICES Strategic Plan, aquaculture and the Arctic.

Aquaculture

The IMR in 2013 had provided a secondment for one year to work in the secretariat and to provide guidance on developing aquaculture science and advice to member countries. The final product tabled to SCICOM in March 2014 was a strategic paper on the topic which SCICOM took note of without comments. The secretariat upon request from Bureau in June 2014 developed the document further. That draft (Annex 1a) will be reviewed again by the Bureau at this ASC as the basis to continue with establishing dialogues with stakeholders such as FEAP, EATIP, CIMTAN and EAS.

ICES continues to operate with ISO/OSI on a Liaison A status (full access to WGs and documents) through its WGAQUA representing ICES in the procedures (for instance, environmental impacts, standards). WGAQUA was also involved in 2014 in providing advice on aquaculture to OSPAR upon their request.

The Arctic

The secretariat has established work relationships with the following working groups and activities under the umbrellas of Arctic Council and IASC:

- Arctic Monitoring and Assessment Programme (AMAP) (<http://www.amap.no>)
- Conservation of Arctic Flora and Fauna (CAFF) (<http://www.caff.is>)
- Protection of the Arctic Marine Environment (PAME) (<http://www.pame.is>)
- International Arctic Science Council (IASC) and its ICARP III process (International Conference in Arctic Research Priorities, under the joint umbrella of AC and IASC) to culminate in the actual conference in 2015 (<http://icarp.arcticportal.org/>).
- Meetings of Scientific Experts on Fish Stocks in the Arctic Ocean (<http://icarp.arcticportal.org/>). The meetings discuss fish stock and fisheries issues and reported to the governments of Canada, Greenland, Norway Russia and the US.
- The joint AC and IASC Sustained Arctic Observation Network (SAON).

The ICES Secretariat has submitted two theme session proposals to the ICARP III planning committee, in cooperation with the Canadian SCICOM delegate and the Chair of ICES AFWG, and in cooperation with the German SCICOM delegate:

Innovative Approaches to Communication for a Changing Arctic (conveners Jörn Schmidt, Stephanie Pfirmann, NN indigenous)

Fisheries in the Arctic Ocean - just a dream or a reality in the near future? (conveners Kevin Hedges, Carolina Behe, Bjarte Bogstad)

ICES continues to have Arctic-related theme sessions at the ASC (2014 Session F).

The Arctic Council currently negotiates an international agreement on science cooperation for the Arctic. ICES has applied for observer status in the relevant meeting. The AMAP 28th Working Group Meeting will be held in Whitehorse, Yukon, Canada

16 - 18 September, including a joint meeting with PAME WG. In early September an information exchange took place at the ICES HQ with AMAP secretariat staff and opportunities for cooperation were identified: IEA and integration of contaminants, inventory of Arctic surveys, a possible workshop on IEA tools in 2014 and the upcoming meeting in Whitehorse and the role of ICES in setting priorities for research.

Annex 1a: ICES and aquaculture – proposal for a dialogue meeting

Bureau is invited to discuss and comment on the document that is intended for discussion at Council.

It should be noted that, as part of soliciting comments to this draft outline, concerns were voiced from the aquaculture community on the broadness of the request(s) received, and the need for further guidance on future request as well as a better link to the advisory side. Also some concerns were raised as to the time used for handling aquaculture requests within WGAQUA.

The overall aim of a proposed dialogue meeting to be arranged in [xx, on xx.xxx] is to bring together high level government administrators at the national and international level, scientists involved in the process of developing scientific advice in relation to aquaculture (finfish, shellfish, and plants/seaweed), and representatives from a broad spectrum of industries and stakeholders. The aim of a proposed dialogue meeting is to debate and discuss the advisory process in response to aquaculture management science needs in ICES Member Countries, seen in the light of an ecosystem approach. Proposed aspects of the meeting could be:

- 1) Stocktaking of existing legislative frameworks related to aquaculture operations
 - 2) Stocktaking of recent ICES aquaculture work (relevant terms of reference in ICES expert groups)
 - 3) Dialogue on current and emerging scientific issues related to aquaculture
 - 4) A general discussion on matters of mutual importance in relation to the request for and provision of scientific advice
-

The ICES Strategic Plan – and Aquaculture

With the ICES Strategic Plan, 2014–2018 ICES has charted its course for the next five years. Given the status of many commercial wild stocks and impacts on the wider ecosystem from fishing activity, ICES recognizes the future increased demand for aquaculture in response to a growing global demand for protein. In the plan ICES has made a number of strategic choices, *i.a.* to further develop ICES science, advisory, and data work on aquaculture. As part of the work to produce the information and advice decision-makers need, ICES will respond to the evolving policy context and requests on aquaculture/aquaculture–environment interactions. This shall be seen in the light of the central focus of the Plan: to build a foundation of science around regional integrated ecosystem understanding, which ICES will use in producing integrated ecosystem assessments, as a fundamental link between ecosystem science and the advice required in applying the ecosystem approach.

A key principle for ICES in developing scientific knowledge is addressing information gaps and needs, adding value to on-going processes. For this reason it is important to take into account the changing science and policy landscape, including:

- national legislation in member countries

- the work of International organizations, such as the International Organization for Standardization;
- the recently established trans-Atlantic Research Alliance, and its EU, Canadian, and US Sustainable marine food production (fisheries and aquaculture)¹
- regional organizations, such as
 - the North Atlantic Salmon Conservation Organization (NASCO), Agreements and Guidelines relating to aquaculture, introductions and transfers, and transgenics
 - the European Aquaculture Technology and Innovation Platform (EAT-iP), the European Aquaculture Society (EAS), the Federation of European Aquaculture Producers (FEAP), EFARO (The European Fisheries and Aquaculture Research Organization), Canada's Sustainable Aquaculture Program and the European Union. EU establishing legislative standards for Aquaculture – environmental interactions through the Water Framework and Marine Strategy Framework Directives, the Strategy for the Sustainable Development of European Aquaculture, and work to develop guidance documents for the sustainable development of aquaculture in Europe.
- current and upcoming projects, cf. funding opportunities, for instance Horizon 2020 and Canadian Program for Aquaculture Regulatory Research.

ICES current work on aquaculture

ICES work on Aquaculture is now focused within WGAQUA², established as a single group in 2012 following the existence of several other ICES expert groups which have, since 1977, contributed to developing science on the environmental dependence and effects of aquaculture. The group's mandate is to focus on aquaculture–environment interactions and to address advisory and science requests related to the sustainability of aquaculture farming practices made by member countries.

WGAQUA works on multi-annual Terms of Reference and is addressing these current work terms in three thematic groups: Ecosystem Interactions, Benthic Effects, and Pest Management. Depending on the nature of the request, collaboration with other ICES working groups (e.g. Working Group on Application of Genetics in Fisheries and Mariculture (WGAGFM), Working Group on Pathology and Diseases of Marine Organisms (WGPDMO), Study Group on Socio-Economic Dimensions of Aquaculture (SGSA) may also bring more flexibility to the tasks WGAQUA will be able to address.

Emerging aquaculture issues are identified in the WGAQUA 2014 report, although some issues are beyond the scope of ICES to contribute. Further action would require an internal discussion on ICES in aquaculture, taking into account the expectations of our partner organizations and stakeholders (e.g. product quality, consumer safety and health, aquatic health and welfare).

¹ <http://ec.europa.eu/research/iscp/index.cfm?lg=en&pg=transatlantic-alliance>

² <http://www.ices.dk/community/groups/Pages/WGAQUA.aspx>

At the 2014 ICES Annual Science Conference Theme Session K *The application of science for ecosystem-based management of aquaculture* is intended to promote interaction between the main groups involved within the aquaculture sector, namely; Scientists who develop the evidence and knowledge base, regulators and policy-makers who set the management and regulatory frameworks, and those in the aquaculture industry who work within the regulatory framework and depend on the development of an appropriate knowledge base to enhance and improve production of aquaculture products. The session will open with key note papers on relevant case studies demonstrating the needs and solutions from both a governance and development perspective.

ICES advice on aquaculture

ICES responds to requests for advice on aquaculture. In 2010 and 2014, ICES responded to OSPAR requests on effects of mariculture on populations of wild fish³, and interactions between wild and captive fish stocks⁴. Informal interest on aquaculture advice has been expressed by Member Countries, but to date no formal request has been received. Evaluating the sustainability of aquaculture is a debate that is underway in other countries with significant aquaculture production and it is likely that they too will seek advice from ICES on aquaculture – environment interactions.

Background

The aquaculture industry is the fastest growing food production sector in the world, with the FAO estimating annual growth in fish, shellfish and aquatic plant production increasing globally at a rate of 8.4%. As aquaculture has potential to develop into a significant component of world food security in the 21st Century, there is a continuing need for a strong science and knowledge base informing management practices and guiding the development of a sustainable aquaculture industry. This may facilitate increased food production both for direct human consumption and as feed and raw materials for the human food chain.

Aquaculture in the ICES area has showed rapid growth over the last three decades. In the beginning of this period science was mostly focused on developing the biological basis for aquaculture (developing species and mariculture systems). Over the past two decades the focus has shifted to the environmental effects of aquaculture on wild stocks of the cultured species and on the ecosystem as a whole. Spread of disease, parasites, introduction of pharmaceuticals used in aquaculture, and genetic interactions between wild and cultured populations may have negative impacts on the marine environment and associated economies. Other effects may include the release of nutrients and organic material, the excessive depletion of forage resources⁵ by cultured fish and shellfish, as well as the potential spread of non-indigenous species. In addition, there can also be positive effects of aquaculture (e.g. eutrophication control

3

<http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2010/Special%20Requests/OSPAR%20effects%20of%20mariculture%20on%20wild%20fish.pdf>

4

[http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2014/Special%20Requests/OSPAR %20Interactions of wild and captive fish stocks.pdf](http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2014/Special%20Requests/OSPAR%20Interactions%20of%20wild%20and%20captive%20fish%20stocks.pdf)

⁵ Harvested components of fish feed or plankton consumed by unfed shellfish culture

by shellfish filtration). Understanding, stimulating, reducing, or avoiding these effects requires further assessment and study.

ICES holds a key position in the future of aquaculture around the North Atlantic for three fundamental reasons.

- 1) Today, more than 50% of all consumer seafood is supplied by aquaculture and this proportion is expected to continue to rise. This represents a major activity that impacts, both directly and indirectly, marine resources in the ICES area and around the world. ICES is a natural contributor to both the science and the advice on aquaculture's interactions with the marine environment given its previous work in the area and our geographical scope, covering marine science institutions in our 20 member countries and beyond.
- 2) National governments and the European Commission are actively encouraging growth in this industry (e.g. CFP 2013) on the one hand, and on the other hand many regulatory frameworks in the ICES area are stalled in the face of scientific uncertainty regarding the interactions between aquaculture and the marine environment.
- 3) Aquaculture funding institutions require regulatory certainty and demonstrated market demand before supporting business ventures, both large and small.

ICES holds the scientific capacity in aquaculture practices, environment interactions and impact mitigation, if requested by clients, to facilitate the sustainable growth of this industry through the resolution of the regulatory certainty issues. ICES is unique in its structure and is in an ideal position to address these issues. A core ICES competence is transferring science from the laboratory and into society through the advisory process. ICES marine science and advice, in combination with our data resources, will provide an unprecedented opportunity to playing an instrumental role in a prosperous blue economy that is supported by a healthy marine environment with robust fishing and aquaculture industries.

Annex 5: Theme Sessions for ASC 2015

ID	Title	Conveners
1 2	Advancement of Stock Assessment Methods for Sustainable Fisheries	Steve Cadrin scadrin@umassd.edu Ciaran Kelly ciaran.kelly@marine.ie Rick Methot richard.methot@noaa.gov
2 28	Operationalizing ecosystem-based fisheries management	Tim Essington, essing@uw.edu Phil Levin, Phil.Levin@noaa.gov Christian Möllman, christian.moellmann@uni-hamburg.de
3 1 + 20	Ecosystem monitoring in practice	Elena Eriksen (elena.eriksen@imr.no) Matthias Schaber (matthias.schaber@ti.bund.de) Ralf van Hal (ralf.vanhal@wur.nl) Sven Gastauer (sven.gastauer@postgrad.curtin.edu.au) or PICES convenor
4 9	Assessing biodiversity	W. Nikolaus Probst,nikolaus.probst@ti.bund.de Oscar Bos, Oscar.Bos@wur.nl Simon P.R. Greenstreet,S.Greenstreet@MARLAB.AC.UK
5 11	Beyond the connectivity in the ocean: bridging forefront advances on early life stages and adults connectivity to assessment and management challenges	Manuel Hidalgo, jm.hidalgo@ba.ieo.es Claire Paris, cparis@rsmas.miami.edu Lisa Kerr, lkerr@gmri.org
6 26	Small-scale fisheries under data poor scenarios	Sebastian Villasante (Spain, sebastian.villasante@usc.es) Cristina Pita (Portugal, c.pita@abdn.ac.uk) Jose Pascual (Spain, jpascual@ull.es) Graham Pierce (United Kingdom, g.j.pierce@abdn.ac.uk)
7 23 + 24	Managing marine ecosystem services in a changing climate	Sebastian Villasante, Spain (sebastian.villasante@usc.es) Manuel Barange, UK (maba@pml.ac.uk)
8 32	Ocean Acidification: Understanding chemical, biological and biochemical responses in marine ecosystems	Silvana Birchenough, PhD (UK) silvana.birchenough@cefas.co.uk Pamela Walsham, MSc (UK) Pamela.Walsham@scotland.gsi.gov.uk Klaas Kaag, PhD (The Netherlands) Klaas.Kaag@wur.nl
9 27	A holistic ecosystem approach for marine management and conservation: Opportunities through the application of genetic and genomic approaches	Jann Th. Martinsohn, jann.martinsohn@jrc.ec.europa.eu Dorte Bekkevold, db@aqu.dtu.dk Filip Volckaert, Filip.Volckaert@bio.kuleuven.be
10 22 + 25	CIA ON THE LOOSE	Jesper H. Andersen (jha@NIVA-Danmark.dk) Laura Uusitalo (laura.uusitalo@ymparisto.fi) Jan Tjalling van der Wal (jan_tjalling.vanderwal@wur.nl)

11	6	Sustainable approaches aquaculture in the context of environmental change	Carrie J. Byron, cbyron@une.edu Damian C. Brady, damian.brady@maine.edu Jens K. Petersen, jkp@skaldyrcenter.dk
12	14 + 18	Science-Industry Partnerships: The value of cooperative research in Fisheries and Marine Management	Clara Ulrich, Denmark, clu@aqua.dtu.dk John Manderson, USA, john.manderson@noaa.gov Mike Fitzpatrick, Ireland, mike@irishobservernet.com Richard Robins, USA, richardbrobins@gmail.com
13	16	Social, economic and ecological impact assessment across marine sectors?	J. Rasmus Nielsen, rn@aqua.dtu.dk, jschmidt@economics.uni-kiel.de Eric Thunberg, Eric.Thunberg@noaa.gov Dan Holland, Dan.Holland@noaa.gov
14	13 + 19	Seafloor habitat mapping: from observation to management	Frank-Detlef Bockelmann, Germany (frank-detlef.bockelmann@hzg.de), Pål Buhl-Mortensen, Norway (paalbu@imr.no), Ibon Galparsoro, Spain (igalparsoro@azti.es), Steven Degraer, Belgium (Steven.Degraer@mumm.ac.be)
15	3	Marine spatial planning and fisheries: A stock-take on approaches, examples and future needs	Franscec Maynou, maynouf@icm.csic.es Erik Olsen; erik.olsen@imr.no Vanessa Stelzenmüller; vanessa.stelzenmueller@ti.bund.de
16	LS	How to hit an uncertain, moving target: achieving GES under the MFSD	Graham Pierce, Henn Ojaveer, Mark Tasker, Antonina dos Santos (the proposal arises from the SIBAS-SSGEPD open session at the 2014 ASC, which also involved Simon Greenstreet, Ann Bucklin, Steven Degraer, and Mark Dickey-Collas)
17	17	From genes to ecosystems: spatial heterogeneity and temporal dynamics of the Baltic Sea	Karin Hüsey (kh@aqua.dtu.dk) Jan Dierking (jdierking@geomar.de) Linda Laikre (linda.laikre@popgen.su.se)
18	7	Causes and Consequences of Hypoxia	Karin E. Limburg (klimburg@esf.edu) Valerio Bartolino valerio.bartolino@slu.se Benjamin Waltherbwalther@utexas.edu
19	8	Basin scale dynamics at lower trophic levels in the North Atlantic	Asththor Gislason astthor@hafro.is Claudia Castellani cxc@sahfos.ac.uk Peter Wiebe pwiebe@whoi.edu
20	-	Practical application of Genetic Stock Identification for the conservation, management and restoration of Diadromous fish species	Dennis Ensing, dennis.ensing@afbini.gov.uk Philip McGinnity, University College Cork, Ireland, P.Mcginnity@ucc.ie

Annex 6: SCICOM September 2014 – Actions and Decisions

ITEM NO.	AGENDA ITEM	ACTIONS AND DECISIONS	RESPONSIBLE	DEADLINE
3	Follow-up on decisions taken at the meetings of SCICOM (March 2014)	The ICES Data Centre will contact Aquanis/Sergej Olenin (Klapeida University) and enquire about the possibility of setting up an online reporting tool of non-indigenous species in ICES.	Ingeborg de Boois/Head of Data Centre	SCICOM midterm meeting
3	Follow-up on decisions taken at the meetings of SCICOM (March 2014)	The update from DIG to SCICOM on the feasibility study on “Scientific data storage under the Data Collection Framework” was postponed till the SCICOM midterm meeting.	Ingeborg de Boois/Head of Data Centre	SCICOM midterm meeting
5	SSGEPI Chair position	Decision: Henn Ojaveer was approved by consensus as SSGEPI Chair for the period 2015–2017 (with the possibility of a one-year extension).	–	–
8	Performance measurements for Strategic and Implementation Plans	Action/conclusion: The SCICOM Chair will report back to Bureau on the views expressed by SCICOM members and SCICOM Leadership will continue to work on this.	SCICOM Chair	Council October 2014
10.4	GEF/LME	Action: The Secretariat should contact JPI OCEANS and suggest regular exchange to have an overview of what is happening within the JPI. ICES should also have regular exchange with other supranational organizations like BONUS.	HoS	–
10.10	Horizon 2020 (ICES)	Action: The SCICOM Sub Group on proactive Science calls will work on a way to increase ICES participation in the next H2020 rounds, as well as consider a process to assess proposal quality.	SCICOM Chair/HoS	–
11.1	Draft Resolutions for Symposia	6th Zooplankton Production Symposium Decision: The resolution was approved by SCICOM, including financial support of EUR 10,000, including the request for the ICES Journal of Marine Science which was supported by the IJMS EiC and PUBCOM.	Secretariat/HoS	
11.1	Draft Resolutions for Symposia	Symposium on “Targets and limits for long term fisheries management” Decision: The resolution was endorsed by SCICOM, and publication as a symposium volume in the ICES Journal of Marine Science was supported by PUBCOM.	Secretariat/HoS	
12	Cost of Science Programme	Action: The questionnaire needs to be slightly revised for institutes situated in	Secretariat/HoS	

	(questionnaire process)	the US and Canada.	
14	ICES Science Fund	Action: The application form be updated for applicants to clearly state; links to ICES Science Plan, engagement between Academic and Government science institutes and if the proposer is an early stage career scientist.	SCICOM Chair/HoS/Secretariat
14	ICES Science Fund	Decision/Action: The proposal for EG involvement should be clearer and the purpose of it should be clearly stated in the document.	SCICOM Chair/HoS/Secretariat
15	SCICOM Forum	Decision: SCICOM supported the proposal to have a SCICOM Forum	Secretariat
16	ICES Training Group (ITG)	Action item: It was suggested to do a review/questionnaire to show the impact in the community of ICES training courses. The Training Group Chair felt that the timing is ripe to do this exercise. It could be a questionnaire sent to EG Chairs asking if they noticed an improvement in capabilities of their members. The format and practicalities of a questionnaire to be further explored by the Training Group.	Training Group/Steve Cadrin
17	DIG	Digital Data Citation Action: The DIG Chair invited SCICOM to review the Joint Declaration of Data Citation and to endorse the 8 principles. SCICOM members were also invited to give feedback on how to achieve that credit is given to the originators for data (also) stored at ICES.	DIG Chair/SCICOM Members
19	PUBCOM	Decision: Category 3 draft resolutions (Symposia requesting ICES co-sponsorship) are often submitted at a short notice. In order to allow time for a better dialogue, a deadline for Category 3 draft resolutions to be submitted to the Secretariat should be 1 September. SCICOM congratulated the Editor-in-Chief on the high quality of the journal and im-pressive impact factor. The whole team is very efficient. Decision: SCICOM supported the decision tree pending revision of the item 7 last sentence (“can replaced by “will”). Decision: SCICOM formally approved the Category 1 resolutions.	–
21.3	Steering Group on Integrated Assessments (SSGIEA; Reid)	Action: SSGIEA/Dave Reid will start documenting where the IEA groups diverge and converge in terms of methods, approaches and objectives. It was suggested that we may need to set up a conference soon on IEAs. Funding will be sought.	SSGIEA Chair, Dave Reid

22	Council Steering Group on MSFD – information	Action: SSG Chairs, based on the previous mapping exercise, should review their WG ToRs and identify knowledge MSFD related outputs. Then SCICOM should identify available applicable knowledge (products) and share with ACOM before December 2014). ACOM will decide on whether to evaluate the usefulness of these outputs, have them peer-reviewed, and proceed with pro-active advice to the European Commission.	SSG Chairs, SCICOM Chair, Secretariat
23.1	SCICOM/ACOM Strategic Initiative on Biodiversity (SIBAS)	Action: SCICOM members were requested to nominate potential candidates (including short CV/bio) for a new SIBAS Chair with a deadline of 3 October for final approval at the 16 October WebEx meeting. Candidates should be willing to serve. Action: A clearer scoping for SIBAS to be prepared by the incoming Chair and ACOM Co-Chair and ta-bled for SCICOM midterm meeting.	Pending SIBAS Chairs
23.2	SCICOM Strategic Initiative on Climate Change (SSICCME)	Action: HoS, SICCME Co-Chairs to look into options for SICCME presence at the COP-23 IPCC Global Climate Conference and give an update to SCICOM March.	HoS, SICCME Co-Chairs
23.2	SCICOM Strategic Initiative on Climate Change (SSICCME)	SICCME leadership Action: SCICOM members were encouraged to begin identifying candidates for both co-chair vacancies in the coming months. The election of new co-Chairs will be scheduled for the SCICOM midterm meeting.	SCICOM Members
23.3	SCICOM/ACOM Strategic Initiative on Stock Assessment Methods (SISAM)	Action: SCICOM members were encouraged to convey to their home countries the message of nominating members for the Methods WG (WGSAM).	SCICOM Members
23.4	Need for further Strategic Initiatives	Action: Material (formal proposals) will be prepared for the midterm SCICOM meeting and SCICOM will revisit the question pending Council approval of funds for 2015–2018.	SCICOM Chair/HoS
24	ASC 2015	Action: A subgroup consisting of Pierre Petitgas (Chair), Jan Jaap Poos, Antonina Dos Santos, Myron Peck, Eskild Kirkegaard, Jörn Schmidt and Dave Reid will work by correspondence and report to the SCICOM midterm meeting 2015.	Pierre Petitgas/HoS
24.2	ASC Theme Sessions 2015 (final decisions)	Decision: The final list of Theme Sessions approved by SCICOM is given in Annex 5.	Secretariat
25	Update from Awards Committee	Action: The Chair of the Awards Committee will contact the ACOM Chair to enquire about ACOM representation	Chair of Awards Committee

		on the Committee.	
25	Update from Awards Committee	Merit Awards Action: Since a new group and a new Chair is running the merit award selection each year, there needs to be a review of how the Award Selection Group works during the ASC, of what is done and how. Myron Peck volunteered to be on the group.	Chair of Awards Committee/Secretariat
28	Any other business	SCICOM spring dates.Action: The next midterm meeting will be held in Copenhagen from Wednesday, 8 April 2015 (starting at 13:00) till Friday, 10 April 2015 (ending at 13:00). The Joint ACOM leadership/SCICOM business group will meet on Friday, 10 April, from 14:00 till 17:00.	SCICOM